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INTERNATIONAL DIVISION OF LABOUR PROGRAMME

THE REPUBLIC OF KOREA: EMPLOYMENT, INDUSTRIALISATION AND TRADE

by

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PREFACE

This study on the Republic of Korea is the twelfth case study that has become available in the ILO research project on Employment, Trade and North-South Co-operation (Phase II).

The project, which is the follow-up of an earlier project carrying the same title[1] makes an attempt at analysing the economic and especially the non-economic constraints under which economic policy-makers operate, placing strong emphasis on the implications for employment and unemployment . Past policies are evaluated in an effort to explain their "success" or "failure". More specifically the questions that the project tries to answer are:

(a) What are the socio-political factors, the behavioural responses and the institutional arrangements as well as the policies initiated by governments which have shown to be important in the promotion of successful industrial adjustment policies in developed countries;

(b) What are the socio-political, cultural and economic factors which have contributed to the successful economic developments of the Newly Industrialising Countries (NICs); and

(c) What lessons can be learned from the success of the NICs that can be useful to other developing countries which have committed themselves to a broadly similar growth path.

These questions are being approached at two levels:

(i) By means of a number of country case studies on Developed Countries (United Kingdom, United States, Japan, the Federal Republic of Germany, the Netherlands), Newly Industrialising Countries (the Republic of Korea, Singapore, Brasil and Mexico) and Developing Countries (Cameroun, Tunisia, Sri Lanka and the Philippines).

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[1] For a description of the results of Phase I, see Geoffrey Rensaw (ed.): Employment, Trade and North-South Co-operation (Geneva, 1981).

(ii) Through a general report that is being prepared in Geneva and which, to a large extent, will be built on the findings of the country reports.

The phenomenal success of the Newly Industrialising Countries (NICs) has been the subject of a number of studies. These have examined such factors as the role of foreign capital, international sub-contracting and governments' export promotion policies. In our project we are focussing on two sets of questions. First, to what extent will the rapid economic growth rates of the NICs be continued; how has their product range changed during the period of rapid growth and along what product lines are the NICs likely to develop in the future? Second, what elements of the NICs' development path can be taken as a model to be emulated by other developing countries? In order to answer this second question it is important to understand to what extent social, political and cultural factors, unique to the NICs, have contributed to their success and to what extent institutional arrangements and economic policies can be successfully paralleled by other developing countries attempting to follow this path.

This study on the Republic of Korea has been written by Professor Tony Michell of the University of Hull, United Kingdom. It is organised as follows:

The Introductory Chapter provides a general background to the study. It describes how Korea's colonial past, the separation between North and South, the civil war, and economic aid have influenced the country's pre-1960 economic development. The post-1960 years are subdivided into periods of "transition to growth", "export-led high growth", and the more recent "unstable growth" period. A few institutional and cultural factors that are considered relevant to a better understanding of the economic analysis are discussed. These include the early exposure to industrial discipline and the high educational level of the population, the dominant place of the government and the absence of effective political opposition, as well as the historically fairly equitable income distribution.

The country's economic development is the subject of Chapter II. The priorities of each of the five development plans are discussed, as well as why these priorities changed over time.

The phenomenal growth in output and employment, and the role of exports and the domestic market in this growth process are analysed. The crucial role of the government, through its ownership of the banks, as most important financier in the economy is highlighted.

Chapter III considers in more detail the role that government, workers and entrepreneurs have played in rapid growth. Government officials identify greatly with the interests of the sector they serve. The system of quasi-government institutions equally contributes to efficienct government-business relations. The very comprehensive and well organised system of statistics allows the government to take quick action whenever necessary.

The government has frequently and effectively used its considerable power to steer the economy, even at a time that some of the large Korean enterprises have become multinationals in their own right. Most Korean enterprises have a high debt equity ratio, and depend on loans for their expansion and survival. This made them dependent on the government that, until recently, owned most of the financial sector.

Wages and labour conditions tend to be superior in companies that produce for the domestic market and in modern and big enterprises. The success of light export industries has depended to a large extent on the young women they employ. These young women are paid at least 20 per cent less than their male counterparts. The role of the unions is small. They are closely controlled by the government. Moreover, an elaborate system of dispute mediation exists. The traditionally very equitable income distribution appears to have worsened in the 1970s. This is, in large part, due to the increase of non-wage income in national income.

Chapter IV deals with two of the major export industries: textiles and clothing, and electronics. It gives a more detailed illustration of the trends and issues discussed in the previous chapters. The most remarkable aspect of the development of textiles and clothing is that it remained such an important export sector in spite of a forecasted decline and a simultaneous decline of government support. Clothing because it needs little capital investment was frequently used in the past to finance other activities in the same company. But lower demand and higher protectionism abroad has led to a trend towards other activities now subsidising clothing, rather than the other way around.

Electronics is the sector that has received most foreign investment. It provides a good illustration of the dilemma the government has faced, on the one hand desirous to promote rapid growth of the industry and, on the other hand, not wanting to become overly dependent on foreign investment. This dilemma was partially resolved by the government providing substantial financial and logistic support to the industry, most of it channeled through the Fine Instruments Centre, where a great deal of research was also undertaken.

In the concluding chapter, the leading threads are picked up again and an attempt is made to present a complete picture of the causes and consequences of the country's high economic growth. When asking what lessons can be learned from the experience of the Republic of Korea that might be applied in other countries, the author mentions the advantage of planning as a way to foresee and prepare for bottlenecks as well as the efforts made to let the rural sector participate in growth. Control of credit and thus of its allocation proved a mechanism that greatly enhanced the efficiency of the planning process. Yet despite the obviously large degree of public intervention in the economy, he reminds us that the application of rules and regulations has been very flexible. Michell is pessimistic about the employment prospects in the Republic of Korea. Rising wages and lower growth prospects, together with a steadily rising labour force, lead him to believe that a rise in unemployment may be inevitable.

This working paper is a component of the final output of our research project on Employment, Trade and North South Co-operation (Phase II). It is also an input into a broader study that is being written in Geneva, and we would welcome any comments provoked by it.

Gijsbert van Liemt

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INTRODUCTION

In describing the Korean process, the main problem is to do justice to the major discontinuity which occurred in 1979. Since the major brief was to describe the Korean process from the point of view of potential lessons, much of the analysis deals with the pre-1979 economy. As the report was prepared 1982, data was not available, and 1978 and 1979 represented the high point for most important indicators. 1979 represents the end of an eighteen year process.

In 1979-80 a number of transitions began which cannot yet be fully assessed. After the first year of negative economic growth since the Korean war, the aim of policy makers has been to achieve a "second take-off". It is too early to be certain that this has been achieved although the results for 1982 and forecast for 1983 look promising.

There is a rapidly growing literature on Korean development in English, and an explosive growth of literature in Korean. The following study is based as far as possible on a reinterpretation of the original data, rather than other studies, although the footnotes make the debts to other scholars obvious. Two books in particular have provided vital information, Jones and SaKong's Government, Business and Entrepreneurship in economic development: The Korean Case, and Wontack Hong's Trade, Distortions and Employment Growth in the Republic of Korea. In addition one seminal article by Bai Moo-gi, "The Turning Point" has provided an important basis to much of my interpretation of the Republic of Korean development in the 1970s.

The final result is a condensation of my original research in which the chief victim has been the statistical material. It is probably only the author who ever wishes his work were longer, but to all those who gave their time so generously in interviews and in providing material which does not appear goes my especial thanks.

CHAPTER I

THE SOCIAL AND ECONOMIC CHARACTERISTICS OF THE REPUBLIC OF KOREA

1. Korean characteristics: The setting of Korean development

The internal cultural, historical, sociological and geographical variables which have influenced the Republic of Korean development have often been commented on, but rarely analysed in depth. It is essential to sketch these factors and indicate their relative importance both in order to understand the dynamics of the Republic of Korea development and to delimit the degree to which the Republic of Korea forms a unique case whose experience offers limited usefulness to other developing countries.

The Republic of Korea is an unusual country in a number of respects. A temperate country lying across the latitudes comparable with Spain or California, it suffers much colder winters than either country. Historically it is only half a country, cut-off from the North with which it shared a common course of development to 1945. Although part of mainland Asia, from an economic point of view it is an island, distant from every economy with which it has relations except Japan. Physically the terrain is a constraint on development with approximately 70% of the land area mountainous.

The Republic of Korea is the fourth most densely populated country in the world with 38.2 million inhabitants in 1980. Of the 96 countries classified by the World Bank as low or medium income countries, only 13 have a larger population.[1] Though large in terms of population, The Republic of Korea's land area is small. Of the same 96 countries, only 20 have a smaller area than The Republic of Korea's 99,000 sq. kilometers. There are distinct advantages in being such a compact country, as well as obvious disadvantages. Notably it has been possible to create a unified market with a minimum of infrastructural investment and low transport costs. Thus it might be argued that the effective Korean domestic market was equal to that of considerably larger developing countries.[2] Table 1.1 sets out some of the key characteristics of The Republic of Korea.

Table 1.1 Basic economic data

	1953	1960	1970	1980	1982
Land area (Sq. km)	98.431	98.431	98.477	98.969	99.022
Population (million)	21.502	24.954	31.435	38.124	39-331
Rate of Increase	n.a.	n.a	n.a.	n.a.	n.a.
Labour force:					
Unemployed	n.a.	8.2%	4.5%	5.2%	4.4
Agriculture	n.a.	63.1	50.4	34	
Man. and mining	n.a.	8.7	14.3	22.6	
Services	n.a. (1963)	28.2	35.2	43.4	
Industrial share of GNP:					
Agriculture	51.7	47.2	33.1	17.2	16.3
Man. and mining	6.3	9.1	17.5	31.3	30.3
Services, etc. (1975 prices)	42	43.7	49.4	51.5	53.1
GNP current prices ($)	1.353	1.948	7.834	56.460	
Per capita GNP ($)	67	80	243	1.481	
Gross domestic fixed capital formation (current prices)	7.2	10.8	24.4	32.7	
Gross domestic savings	8.8	0.8	17.3	19.9	
Foreign savings	6.6	8.6	9.3	10.2	
Ratio of exports/GNP	3.2	4.1	16.0	40.2	
Ratio of imports/GNP	9.8	12.7	25.3	50.4	
GNP growth rate		3.7 (1953-60)	8.5 (1960-70)	8.1 (1970-80)	

Sources: BOK National Income in Korea 1982;
EPB Major Statistics of Korean Economy, 1982

In considering Korean development it is important to stress the fact that the population has been growing rapidly for the last thirty years. In 1955 the density was only 217 persons per square kilometer, whereas by 1979 it was 382. With 67 per cent of the land area mountainous, bearing only poor quality forests, and only 22 per cent of the land area under cultivation, despite efforts to expand the agricultural sector to the limits, the Republic of Korea had little prospect of supporting its population through primary sector activities.

After land reform between 1948 and 1958, the average farm contained less than 0.5 of an hectare of paddy and 0.34 of an hectare of dry field. This left limited scope for commercial agriculture, and only in 1979, after a 20 per cent drop in farm households since 1968 did the average farm size increase beyond 1 hectare.

Given the lack of agricultural land, and high rates of population growth, rapid urbanisation was almost inevitable. One of the notable features of Korean development has been the relatively smooth way in which the influx from the countryside has been handled, so that each year since 1961 urban unemployment appears to have fallen.[3]

In 1946, the year after liberation from thirty five years of Japanese colonial rule, the American Military Government estimated the population of the south at 19.4 million of whom 17 per cent lived in cities of more than 50,000.[4] By 1960, when the population was growing at 3 per cent per annum, the total population was 24.9 million of whom 24.4 per cent lived in cities. Population growth slowed gradually until it had reached about 1.58 per cent in 1980, partly for natural demographic reasons after the post Korean war boom, and more recently through increased family planning and abortion.

By 1970 the total population had reached 31.4 million with 41 per cent of the population living in cities. This was the peak of the exodus from the countryside with major cities recording annual growth rates of up to 10 per cent per annum. Major policy steps were taken to improve rural standards of living and discouraged the growth of Seoul. Despite these measures, the urban population continued to grow, albeit at a slower rate and by 1980, 69.4 per cent of Koreans lived in cities, 32.5 per cent of them in Seoul which in 1982 was estimated to be the fourth largest city in the world, with a population of 8.4 million.[5] At projected rates of growth the total Korean population will reach 45 million by 1991 and 50 million by the year 2000.

If geography and population growth formed part of the framework of the Republic of Korea's distinctiveness, the division of the country left a heavy mark on economic and social life. A major reason for wishing to restrict the growth of Seoul is that the capital lies only 50 kilometers from the demilitarised zone, and therefore within range of North Korean conventional artillery. The separation can be seen to have affected ideology, political development, military preparedness and competitive spirit. Memories of the confused period after the Liberation in 1945-1950 and the Korean war 1950-53 have led to the tolerance of an Anti-communist Law, a National Security Law and Labour Laws which have discouraged not only communist thought, but also mildly leftist notions with serious implications for the operations and ideology of organised labour and other areas of public life.[6]

Broadly one may say that fear of the North and anti-communist propaganda have reinforced residual Confucian ethics of deference to superiors including employers, and discouraged attitudes which might have made the labour force much less tractable. Politically the effect of the presence of the North has had a similar effect dampening opposition for fear of a recurrence of the Korean war, and discouraging the development of a left wing critique of Korean development.

The constant threat from the North has led to a military establishment far beyond the normal size of a developing country, estimated to be the world's sixth largest army.[7] Although much of the expenditure has been supported by the United States so that the proportion of GNP spent on defence has been relatively low, the effect of the labour market has been distinct with 600,000 men removed from the labour force at any one time. As a United States advisor remarked in the late 1950s the size of the Korean army could be regarded as a form of concealed unemployment relief.[8] The political and social influence of the military establishment itself has never been fully evaluated. It is pervasive but has fluctuated in importance considerably over the period of development.[9]

The final element stemming from the division is the sense of competition. The consensus that South Korean development must take place, which grew around 1960 was partly determined by public awareness that North Korean growth was much more rapid. This has also affected the shape of Korean strategy in the sense that the Republic of Korea not only requires a strong army but also a level of social contentment which will prevent North Korean agents from being able to ferment widespread unrest.

The sociological factors are considered in more detail in section 1.4. However most commentators have stressed the importance of the high literacy rate of Koreans and the exceptional stress put on educational achievement. The precise relationship between education and labour force is considered in more detail, but it seems probable that the benefits of Korean education lie as much in the heavy indoctrination of obedience and discipline as in the teaching of the liberal arts.

2. The historical development of the Korean economy

Before it is possible to review the recent dynamics of Korean economic performance, it is desirable to consider the stages of economic development since the Second World War. Essentially there have been five phases:

1) The transition from a colonial economy to an independent economy 1945-1950;

2) The Korean War and reconstruction 1950-1959;

3) The transition from low growth to high growth 1960-1969;

4) Export led growth 1970-1977;

5) Unstable growth and recession 1978-1982.

These divisions differ from those conventionally used in that the transition from low to high growth is argued to have preceeded both the first economic development plan inaugurated in December 1961 and the Military Revolution of May 1961, the two ingredients frequently cited as being the initial conditions of take-off. Secondly the approach is unusual in classifying only the period 1970-1977 as that of export-led growth. This is justified in detail in section 2.2 but is based on the contribution to economic growth of exports compared with other sectors of the economy.[10] This second point is essential if any lessons are to be derived from Korean experience in the 1960s by other developing countries in the 1980s. In essence, the argument is that high growth was achieved in the 1960s by other means than exports, rather than exports stimulating the whole process of rapid growth.

2.1 The transition from a colonial economy to an independent economy 1945-1950.

A satisfactory economic history of the Republic of Korea has yet to be written. Research in progress in both the colonial and post-liberation eras has challenged many of the existing notions of Korean development in the first half of the twentieth century.[11] Equally there is no authoritative analysis of the degree to which the Republic of Korea's pre-1945 heritage has been transmitted into the present and the extent to which it has influenced development between 1960 and 1982.[12]

It is impossible to summarize these influences adequately within the space alloted. The colonial era left a profound psychological mark on all Koreans, which if anything, increases with time and with the generations which did not experience it. Essentially it tended to conserve traditional ways of thinking (which were seen as Korean, as opposed to modern, which were seen as Japanese) and at the same time enhance the status of the two modern forces which were anti-Japanese, Christianity and communism. Unlike other colonial countries the Koreans did not feel any hostility against the West, which was seen as a natural ally against Japan.

For men of ability during the colonial era the options were collaboration, exile or opposition, or increasingly, migration to Manchuria where a unique experiment in economic and social planning was underway.[13] The Japanese directed substantial areas of the Korean economy, first as a major rice producer for Japanese consumers in the 1920s and then as an industrial base with cheap labour for an advance into Asia, and finally as an industrial haven out of reach of the United States air force.

The Republic of Korea emerged from the colonial period as a part economy in two senses. The liberation divorced the Republic of Korea from its major market for exports, Japan, and the division of the country separated complementary functions as table 1.2 shows, with light industry and agriculture in the South and heavy industry and energy sources in the North.

Table 1.2 Division of the Republic of Korea
(Based on 1937 Production data)

Industries	South (%)	North (%)
Textiles	88	12
Lumber	68	32
Printing	90	10
Food Processing	67	33
Machinery	71	29
Metal	15	85
Ceramics etc	38	62
Chemicals	16	84
Gas & Electricity	16	84
Miscellaneous	77	23
Overall	49.8	50.2

Source: A.J. Grajdanzev "the Republic of Korea Divided", Far Eastern Survey, XIV, 20, October 10, 1945, 283.

The United States Military Government attempted with far fewer resources and far less information to make the sort of reforms MacArthur was making in Japan. They were hampered by ignorance, left and centre opposition, uncertainty about the long term separation of peninsula, and even guerrilla warfare.

Despite these handicaps, by the time the United States handed over South Korea to an elected Korean Government in 1948, the economy had recovered to a considerable extent. This was despite the shutting off of power supplies from north of the 38th parallel to the south in February 1948, and problems in obtaining raw materials. Considerable attention was given to creating an

effective national education system which was one of the more effective forms of aid from this period.[14]

The other major contribution of the period was the initiation of land reform. About one third of all arable land was owned by Japanese in 1945 and this was redistributed to the cultivators by the Military Government in 1948. The legislation to redistribute the rest was at an advanced stage when the Korean war broke out in June 1950.

By the end of 1949, United States economic experts were confident about the self-sustained future of The Republic of Korea as an agricultural nation exporting rice, coal, tungsten and fishery products. In this they had reckoned without the Korean war and the rapid acceleration of the Korean population.

2.2 The Korean War and reconstruction 1950-1959

The estimates of damages sustained during the Korean war suggest that most investment prior to 1950 was destroyed in the fighting. If so then the recovery was remarkably quick, since industrial production indices show that by the signing of the cease fire in 1953, many areas of production were as high as in 1949 or early 1950.[15] In fact, reconstruction took place from 1951 onwards since the front line was reasonably stable from that year and United States air superiority prevented bombing from the air in the South. A total of 2.08 thousand million current dollars poured into the Republic of Korea during the 1950s, compared with a total estimate of 6 thousand million (1953) dollars damage.[16]

Despite the high level of aid the Republic of Korea received, in fact supposedly the highest per capita level of aid received by any country, it should not be concluded that all this aid was effectively utilised. A very high proportion of this aid came in the form either of non-essential consumer goods or as agricultural surplus items which depressed domestic agriculture rather than as capital which could be used to redevelop the country.[17] In addition, there was continual friction between the United States aid establishment and the Korean Ministry of Reconstruction over the form of aid and basic economic policy. The result was less affirmative government action throughout the economy than might otherwise have been the case.[18]

A major cause of conflict was the attitude to stabilisation policies to reduce inflation. Even prior to the war the United States had threatened to withdraw all aid unless deflationary measures were adopted. This inflation was accelerated by the war, reaching 630 per cent in the first year and compounded by the U.N. command printing local currency to pay foreign troops without the consent of the Korean fiscal authorities during the early stages of the war.[19]

Throughout the 1950s the United States advised that the fundamental strategy must be the stabilisation of prices, whereas the Korean preoccupation was with reducing the gap between imports and exports, and with building up national resources. In a tacit bargain in the second half of the 1950s, a number of major projects were undertaken which set the foundations of the growth of the early 1960s (as will be shown in the sectoral study on textiles) but at the price of suppressing food prices below the cost of domestic production. In 1958, wholesale prices actually fell. This however was at the cost of throwing the agricultural sector into complete depression.

With agriculture accounting for over 40 per cent of GNP and employing over 60 per cent of the labour force, the result was to slow the growth of GNP to the point where it was overtaken by population growth.[20] At the same time industrial production was growing at over 10 per cent per annum. However this was overlooked in the general gloom about the Korean condition which was increasingly described by the United States as a "hopeless basket case". Per capita income was only just above that of India and falling. Moreover the gloom was deepened by an awareness that industrial recovery in DROK had been unusually rapid, which made the performance of The Republic of Korea even more discouraging.

Despite this outwardly discouraging picture stressed not only in United States documents, but in the lengthy prologue to the First Five-Year Economic Development Plan of 1961 and the early writings of Park Chung-hee, a number of promising developments had taken place in the 1950s.[21] It is part of the received doctrine on the transition from low to high growth to paint the picture of the economy at the end of the 1950s in as sombre colours as possible.

Industrial production was rising at a respectable rate. Between 1955 and 1960, 1,021 industrial enterprises of sufficient scale to still be operating

in 1978 were founded, which some sectors, notably textiles, gave the economy surplus capacity, either to boost exports or to supply a rapid increase in domestic demand.

Land reform had been completed, solving the longstanding problem of rural unrest. Only the unfavourable agricultural policies retarded peasants from investing in their own land. Land reform, inflation and the war had left the Republic of Korea with an unusually equal distribution of income, meaning that even a slight improvement in per capita income would have a large effect on items of mass consumption. Moreover the war had had the effect of drawing all social classes together, and Koreans who lived through this experience stress the nature of the transformation which assisted greatly in producing "the will to develop" in the early 1960s.

A widespread symptom of this desire was the rise in demand for education at all levels. Whereas illiteracy had been as high as 78 per cent of the population in 1945, it had dropped to 27.9 per cent by 1960.[22] The number of Koreans in institutes of higher education had risen from 34,000 in 1952 to 101,000 by 1960, and whereas in 1944 12 million out of 14 million Koreans over 14 had had no education, by 1960 only 6.5 million out of 14.8 million had not received any education and over 1 million had had more than 10 years of education.[23] The demand for education was so high that by the early 1960s there were large reserves of unemployed graduates.

The 1950s also left negative marks. Primarily these manifested themselves in consumer behaviour. There was a marked preference for hoarding commodities rather than holding savings, and for liquid assets rather than assets which were difficult to liquidate at a moment's notice. In respect of company structure the high rate of inflation had allowed outstanding debts to be paid off, and the nature of financial assets appeared much more primitive in 1960 than in 1948.[24]

2.3 The transition from low growth to high growth 1960 to 1969

In 1960, the Republic of Korea had a per capita income in current dollars of $82. This approximates to estimates of the 1868 Japanese per capita income at 1960 prices. The industrial structure in terms of industrial share of GNP and labour force corresponded to that of Japan of 1900 or Britain as far back as 1700. Even assuming that agricultural pricing policies of the later 1950s

were reversed it seemed difficult to predict more than a 2-3 per cent increase in per capita income.

Between 1960 and 1969, the Republic of Korea confounded all such predictions, achieving a per capita growth rate of just under 7 per cent and a GNP growth rate of nearly 9 per cent. A sizeable part of this study must be devoted to explaining this transition.[25]

The early growth of exports, which began in 1960 was not the initial determining factor, given that the contribution of exports to GNP growth in the early 1960s was only about 15 per cent of total growth leaving 85 per cent to be explained by domestic resources.[26] Exports are the most easily explained. The overthrow of Syngman Rhee in April 1960 led to the removal of the extreme constraints under which Japanese trade had operated, augmented by a set of policies mostly adopted in 1959 to encourage exports. It was further encouraged by the favourable conditions in Japan which encouraged Japanese enterprise to subcontract basic labour intensive processes in the Republic of Korea.

If the initial growth came from domestic sources then the major source was not so much new investment as the rational use of underutilised existing resources. Accounting for the rapid rate of growth without the planned rise in domestic and foreign savings by 1965, the Economic Planning Board decided "the high growth rate registered with the relatively small investment ratio was attributable to the remarkable expansion of agricultural production..., and also to the fact that hitherto idle capacity and surplus labour were more effectively utilised."[27]

In this process, economic planning also played an important part. An economic development plan which had been under discussion since 1958 was rapidly completed after the overthrow, in May 1961, of the democratic government which had been formed after the fall of Syngman Rhee in April 1960. The military group who were to rule Korea for the next seventeen years were determined to achieve economic development, and energetically set about creating a climate in which economic growth became a primary national goal.

The initial performance was disappointing (see Figure 1.1). Growth slowed from 4.8 per cent in 1961 to 2.2 per cent in 1962, while inflation soared alongside growth in 1963 and 1964. However, after 1962, all sectors of

the economy expanded rapidly, with manufacturing leading. This began the structural transformation of the Republic of Korea, so that by 1969 industry was contributing 20 per cent of GNP compared with 13.5 per cent in 1961. By 1968 exports were contributing over 20 per cent of incremental growth and rising rapidly as increased investment came to maturity.

The Second Five-Year Plan, 1967-71, identified labour intensive manufacturing as the most rapid source of economic growth, and encouraged investment in export industries at the expense of other sectors. The effects of this strategy became apparent from the late 1960s with the rural-urban gap growing dangerously and resulting in a massive exodus from the countryside to the cities. By the final years of the decade Seoul and other major cities were experiencing annual population growth rates of 11 per cent.

2.4 Export-led growth

By 1969, the export market was beginning to take a larger share of industrial production in many sectors than the home market. Exports were contributing between 20 and 35 per cent of incremental growth, but the domestic economy seemed in danger of slowing down. At the same time labour unrest was growing. Finally, rural electoral support for the government was reduced in the 1971 Presidential elections.

Despite the rapid jump in importance of exports in 1972-73, Government concern was reflected in a new strategy which put great emphasis on building up a new generation of heavy and chemical industry which would initially have an import substitution effect, and the modernisation of the countryside through the New Village (Saemaul) Movement and high agricultural support prices.

The Republic of Korea weathered the oil crisis of 1973-74 and subsequent recession remarkably well. This was through good economic management including maintaining investment so that expansion could be resumed as soon as foreign markets recovered. Hence in 1976 exports leapt once more by 43 per cent at constant prices. The Republic of Korea was also assisted by adroit economic diplomacy which led to the rapid growth of overseas construction in the Middle East, which allowed Korea to realise a current account surplus in 1977 for the first time through her own earnings.[28]

2.5 Unstable growth and recession 1978-1982

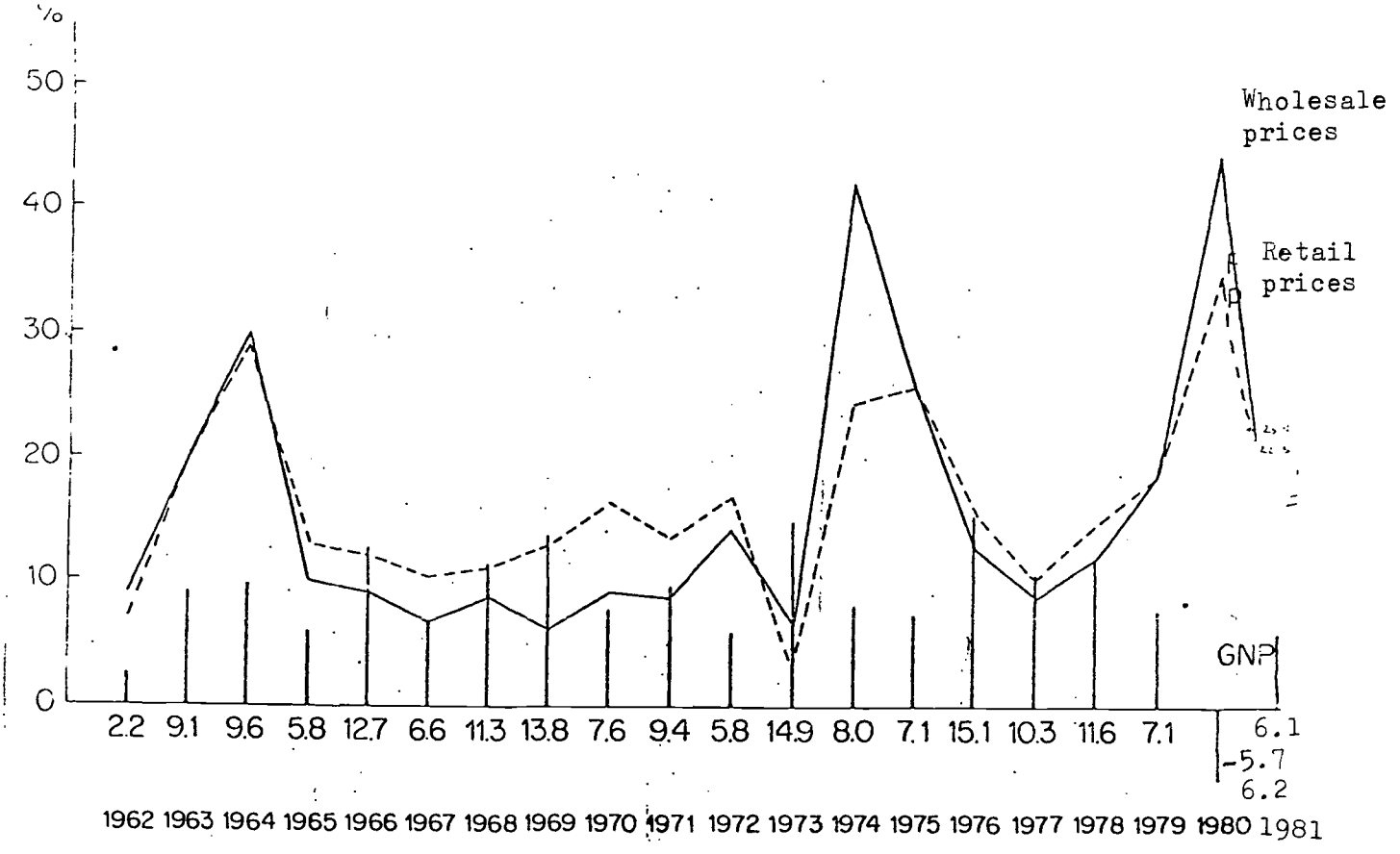
The brilliant recovery from the oil crisis and the growing impact of the policies adopted in the early 1970s stimulated the domestic economy, so that both urban and rural consumers reached a consumption threshold where the sharp rise in demand for consumer goods created unanticipated problems for the economy. Simultaneously the "turning point" in the labour market was passed in the mid 1970s and near full employment in both urban and rural areas pushed up wages, and therefore increased consumer purchasing power further. Shortages in a wide range of commodities further pushed up inflation.

The Government became more concerned about inflation than ever before, and adopted a monetarist policy which severly depressed the domestic market.[29] After years of easy money, businesses were suddenly starved of credit while export markets were lost due to an overvalued exchange rate. Corrective measures were adopted a year too late; and by this time, the economy had ground to a halt. Real exports fell for the first time in 1979, and in 1980 economic growth was negative for the first time since the outbreak of the Korean war. GNP dropped by 6.1 per cent.

Exports recovered in 1980, but this was insufficient to prevent negative growth. Exports grew at a slightly slower rate in 1981. Since the most severe damage in 1980 had been the result of harvest failure which converted a zero growth rate into a negative one, the recovery of agriculture in 1981 and export growth created an increase in GNP of 7.1 per cent. With exports slowing down even more, and little domestic recovery, growth in 1982 was just over 5 per cent.

Under these circumstances a radical reappraisal of economic management in the 1960s and 1970s began in 1980. Consequently the Government adopted a strategy which would keep tighter reins on the money supply which it was believed would keep inflation under control, and a series of measures intended to reinforce the market mechanism. The Fifth Plan which came into effect in 1982 was to be dedicated to reducing government involvement in the economy, which would create the conditions for "a second take-off" into stable high growth rates.

Figure 1: GNP growth rates and inflation



Source: EPB: Major Statistics of the Korean Economy 1982.

3. Review of economic performance

The basic outline of Korean development given above can be summarized as follows. In 1960, the Republic of Korea was amongst the poorest nations in the world with a structure highly dependent on agriculture and a chronic balance of payments deficit. By 1982, the Republic of Korea had moved from the ranks of a low income country, overtaking developing country after developing country to a position approximately half way up the ranks of middle income countries. Between 1960 and 1979, only Japan, Romania and Singapore grew faster.

Figure 1.1 shows the annual growth of GNP. It should be noted that despite the high aggregate rates of growth, the variation from year to year is extremely high. GNP growth rates increased or decreased from year to year by up to 100 per cent, creating a highly unstable situation in terms of demand for money, investment capital and domestic demand. Although other countries might experience a similar degree of fluctuation in percentage terms, a shift from 13.8 per cent to 7.6 per cent (1969-70) or from 5.8 per cent to 14.9 per cent (1972-73) had a tremendous impact on the economy.

The instability of the economy called for a cool nerve on the part of enterprises and government who live from month to month, and not on long term trends. It has encouraged government intervention in every aspect of the economy and business dependence on the government in a series of short term policies aimed at the crisis of the moment outside the long term planning process.

Contrary to the opinion held by opponents of export led growth that exporting throws a developing economy at the mercy of world trends, the input from exports has on the whole been more stable than the inputs from the domestic economy. Post-1973 experience seems to modify this statement, reflecting the increasing instability of the world economy, but it is hard to argue that a lesser dependence on the world economy would have increased stability or growth in the case of a country like the Republic of Korea which must import most raw materials.

Since manufacturing has been the most rapidly growing sector and agriculture the least, the structural transformation has been dramatic. Agriculture's contribution to GNP has dropped from 38.7 per cent to 18 per cent between 1961 and 1981. At the same time manufacturing has risen from

13.5 per cent to 29.5 per cent during the same years. The service sector has grown more slowly from 45.9 per cent to 50.1 per cent (Table 1.3). In employment terms the shift is even greater. Agricultural employment has fallen from 60.6 per cent in 1963 to 32.3 per cent in 1981. Manufacturing has risen from 8 per cent to 21.7 per cent, and employment in services from 28.2 per cent to 44.5 per cent.

Industry and services in the 1970s were able to absorb not only a 57.7 per cent increase in the economically active population, but also a shift of nearly 1 million workers from agriculture to other employment between 1976 and 1980, consequently allowing large productivity gains for the remaining agricultural workers.

Unemployment is more difficult to measure for reasons which will be explained in Chapters II and III, but official figures show a drop from 8.2 per cent in 1963 to 3.2 per cent in 1978, with a rise to 5.2 per cent in 1980. In 1981, it was 4.5 per cent. In short, the Republic of Korea had successfully created enough jobs for a rapidly expanding working population while undergoing a structural transformation which had brought the economy to about the mid-point of development. To reach the structure of modern industrial nations, the agricultural share of GNP would need to be halved and the agricultural labour force would need to drop to a third of its present share. Even at optimistic growth rates this process would take another 20 years.

The impressive growth rates of exports are shown in Table 1.4. It should be noted that these growth rates are expressed in 1975 dollars, as most Korean export statistics are. While reflecting the Republic of Korea's dealings with the outside world accurately, it will be noted that the growth rates expressed in 1975 won, which reflect the impact of exports on the domestic economy, follow a slightly different regime resulting from changes in the exchange rate.

A comparison with imports in the same table shows that whereas in 1962 commodities imported were seven times the value of exports, by 1971 there were just under twice the value. During the rapid expansion of exports in 1972 and 1973 this fell to just 17 per cent higher. The rise in oil prices widened the gap but by 1977 it had fallen to 4.7 per cent. For a number of reasons import liberalisation was preferred to achieving a commodity surplus, and the trade deficit has widened to about 22 per cent in 1981. The increase in overseas earnings since 1975 has reduced the current account deficit to negligible proportions (See Table 2.17).

Table 1.3: Structural change 1963-1982 industrial origin of GNP

At current market prices

	GNP	Agriculture, Forestry and Fishery	Non-Agriculture, Forestry and Fishery	Mining & Manufacturing			SOC		
					Mining	Manufacturing	SOC & Others	SOC	Other Services
	Percentage								
1962	100.0	36.6	63.4	16.2	2.0	14.2	47.1	9.4	37.8
1963	100.0	43.1	56.9	16.2	1.7	14.6	40.6	7.9	32.8
1964	100.0	46.5	53.5	17.2	1.7	15.5	36.3	7.1	29.2
1965	100.0	37.6	62.4	19.9	2.0	17.8	42.5	8.7	33.8
1966	100.0	34.4	65.6	20.2	1.8	18.4	45.4	10.2	35.2
1967	100.0	30.1	69.9	20.6	1.9	18.8	49.3	11.2	38.0
1968	100.0	28.3	71.7	21.3	1.5	19.8	50.4	12.8	37.6
1969	100.0	27.6	72.4	21.5	1.4	20.1	50.9	13.8	37.1
1970	100.0	26.8	73.2	22.3	1.5	20.8	51.0	13.9	37.1
1971	100.0	27.0	73.0	22.4	1.3	21.0	50.6	13.3	37.3
1972	100.0	26.4	73.6	23.4	1.2	22.2	50.2	13.0	37.2
1973	100.0	25.0	75.0	26.0	1.2	24.8	49.0	13.4	35.7
1974	100.0	24.8	75.2	27.3	1.3	26.1	47.9	12.0	36.0
1975	100.0	24.9	75.1	28.0	1.5	26.5	47.1	12.6	34.5
1976	100.0	23.8	76.2	28.8	1.2	27.6	47.4	12.4	35.0
1977	100.0	23.0	77.0	28.5	1.5	27.0	48.6	13.5	34.7
1978	100.0	21.9	78.1	28.4	1.4	27.0	49.7	15.7	34.0
1979	100.0	20.5	79.5	28.0	1.1	26.9	51.5	17.2	34.3
1980	100.0	16.3	83.7	30.2	1.4	28.8	53.5	17.9	35.6
1981 p)	100.0	18.0	82.0	30.9	1.4	29.5	51.1	16.5	34.6

Source: EPB, Major Statistics of Korean Economy 1982, 1983 edition, p. 32.

Table 1.4: Growth of exports and imports

	IMPORTS					EXPORTS				
	Amount (In millions$) current	Index (1975=100)	Growth rate (%)	Real Imports (million $ 1975)	Real Growth (%)	Amount (In millions	Index (1975 =100)	Growth rate (%)	Real Exports (1975 $ millions)	Real Growth Rate
1962	390.1	5.8	37.8	878.6	37.8	54.8	1.1	34.0	103.0	32.4
1963	497.0	7.4	27.4	1,119.4	27.4	86.8	1.7	58.4	161.0	56.3
1964	364.9	5.5	-26.6	812.7	-27.4	120.0	2.4	38.2	216.2	34.3
1965	415.9	6.2	14.0	910.1	12.0	175.6	3.5	46.3	306.1	41.6
1966	679.9	10.2	63.5	1,600.9	64.9	250.4	5.0	42.6	397.3	29.8
1967	908.9	13.6	33.7	1,988.8	32.5	334.7	6.7	33.7	507.9	27.8
1968	1,322.0	19.8	45.6	2,918.3	46.7	486.3	9.7	45.3	716.1	41.0
1969	1,650.0	24.7	24.8	3,699.6	26.8	658.3	13.2	35.4	1,019.0	42.3
1970	1,804.2	27.0	9.3	3,905.2	5.6	882.2	17.6	34.0	1,309.9	28.4
1971	2,178.2	32.6	20.7	4,735.2	21.3	1,132.3	22.6	28.3	1,702.6	30.1
1972	2,250.4	33.7	3.3	4,808.5	1.5	1,676.5	33.5	48.1	2,490.2	46.3
1973	3,837.3	57.5	70.5	6,137.7	27.7	3,271.3	65.4	95.1	3,839.6	54.2
1974	6,451.9	96.7	68.1	6,637.8	8.1	4,515.1	90.2	38.0	4,184.5	9.0
1975	6,674.4	100.0	3.4	6,614.4	0.6	5,003.0	100.0	10.8	5,003.0	19.6
1976	8,405.1	125.9	25.9	8,576.6	28.5	7,814.6	156.2	56.2	6,996.1	39.8
1977	10,523.1	157.7	25.2	10,502.1	22.5	10,046.5	200.8	28.6	8,214.6	17.4
1978	14,491.4	217.1	37.7	13,697.0	30.4	12,710.6	254.1	26.5	9,387.4	14.3
1979	19,100.0	286.2	31.8	14,783.3	7.9	14,704.5	293.9	15.7	9,088.1	-3.2
1980	21,598.1	323.6	13.1			17,214.0	344.1	17.1		
1981	23,871.1	357.7	10.5			20,886.0	417.5	21.3		

Source: EPB, Major Statistics of Korean Economy, 1982, 1983 edition, p. 212.

Quite apart from the structural transformation of the Republic of Korea the improvement in the balance of payments has been impressive. Although foreign borrowing has been high, it has never reached the proportions of Mexico or Brazil and with the rapid growth of exports it has always been possible to meet repayments. Indeed during 1977 and 1978, repayments were made ahead of time.

The Republic of Korea's policy of deliberately running a trade deficit has been of obvious benefit to her trading partners. The benefits have not been equally spread however. With many countries the Republic of Korea has recently moved into surplus, while the deficit with Japan has widened. As explained in Chapter 2, both the Republic of Korea and her other trading partners have suffered from this imbalance, while Japan has been the clear beneficiary of her neighbour's growth.[30]

As will be seen in Chapters II and III, foreign investment in the Republic of Korea has been limited. The Republic of Korea has relied on foreign borrowing rather than direct foreign investment. With the exception of 1965 and 1972-73, foreign investment has always been under 10 per cent of foreign capital entering the Republic of Korea. Indeed under the Fourth Five-Year Plan 1976-81, it was envisaged that direct foreign investment would be held at $100 million at current prices.

Although foreign investment was important between 1965 and 1973, the Republic of Korea has developed along an unusual track by deliberately encouraging the growth of large conglomerates which are now numbered amongst the top 500 non-United States companies. Since 1980, the Government has had second thoughts about this development and has announced more liberal measures to encourage foreign investment.

In essence, not only has the Republic of Korea managed to develop very fast, but has done so to a remarkable degree through her own resources. It is true that overall the Republic of Korea has been one of the largest recipients of United States aid. (The largest in per capita terms according to some writers). But the bulk of this was received during the 1950s, and during most of the 1960s and all of the 1970s the Republic of Korea received no more privileged terms than other developing countries.[31] The one drawback has been that the Republic of Korea has experienced a higher rate of inflation than most Asian developing countries.

There are those who would argue that the Republic of Korea has enjoyed high growth rates precisely because successive governments have pursued Keynesian policies of stimulating the economy by an easy money policy, with an inevitable rise in inflation rates. There are others who would argue that inflation has been largely the result of rising real incomes in an economy in which investment has been directed primarily into export promotion. In either case it may be argued however unfashionably that the trade-off has been beneficial. Government policy since early 1979 argues that inflation has neither been necessary nor beneficial. However, in the last year, it has loosened the money supply considerably in an attempt to stimulate growth. It remains to be seen whether the Korean economy can continue to perform well under such criteria.

4. The institutional and cultural environment

As will have already become clear, the Republic of Korea has an unusual profile; an exceptionally high population density with low agricultural and natural resource potential, a unique historical trajectory as a colony of Japan, followed by United States occupation, a devastating war and then a remarkable recovery and rapid growth from a very low income to a middle income country in 20 years. Are there unique institutional or cultural factors which have furthered Korean development?

The success of the Republic of Korea has been extensively analysed from the economic point of view, but the degree to which cultural and institutional features have contributed to economic success has never been satisfactorily analysed or integrated.

There is a consensus that the general Confucian culture, the high desire for education, the homogenity of the nation and the status accorded to government officials has been of great assistance. However, if successful development had not taken place an equally plausible set of characteristics could have been drawn up which would have included the high reverence for farming in an overpopulated country, the emphasis on learning by rote in Korean education, the proneness of all groups to form non-productive factions, emphasis on personal prestige rather than economic ability and an over bureaucratic mentality. Observers during the colonial period made such comments as "the poise and energy and self-reliance of the Japanese is notably lacking in the Corean... In brain power he is probably at least equal to Japanese, but in general he lacks the latter's ability to put his powers to practical use."[32]

4.1 Socio-cultural conditions favourable to rapid growth

The negative features listed above are all present to some degree in modern Korea. That is to say, while there are indeed characteristics favourable to rapid growth, there are also unfavourable characteristics, just as in any other country.

The association of rapid economic growth since the Second World War with countries with a Confucian heritage, Japan, the Republic of Korea, Hongkong and Singapore has often been commented on in a journalistic fashion. In his background to development Edward Mason has written of this connection stating simply "the parallels with protestantism in the rise of capitalism is obvious" and leaves the matter at that.[33] Not only is the parallel not obvious in that the connection between protestantism and early capitalism is still contested, but the question leaves out of account the largest Confucian country of all - China, which has not experienced the same sort of growth.

The Confucianism of the modern Republic of Korea is very far distant from that of the late nineteenth century. Indeed few Koreans can now read the classical Chinese their grandfathers expressed all their thoughts in, though Chinese characters remain in common usage. What has remained has been the deep respect for the extended family and reverence for "elders and betters" in a family context. Even here it may be argued that the managerial class of modern Korea is less formalistic than the Japanese and less family minded than the Chinese.

The veneration of learning in general and the high social status of civil servants remains. Certainly the sub-Confucian culture which remains teaches extreme ambition and a high desire for success rather than passivity and the status quo.[34] Indeed words implying acceptance such as "destiny" or "fate" are given special attention in the schools as representing an out-of-date mentality.

Desire for success was traditionally directed towards a place in the Government, but with the expansion of education in the 1950s, most candidates were, and still are, disappointed in their quest for a civil service place.[35] Apart from limited openings as a scholar, the other channel of success has been industry and commerce since the 1960s. It is important to note that other routes to wealth have been effectively blocked since the early

1950s. Not only did the war destroy most forms of inherited wealth, but land reform made tenancy illegal and fixed the maximum landholding at 3 hectares. This closed off landed wealth and investment in agriculture however culturally appealling it might be. Likewise inflation eroded savings, so that apart from blackmarketing, urban land speculation and lending money on the curb or informal money market, the only source of wealth was industrial and commercial.

At the same time, it became extremely difficult to leave the country because of highly restrictive regulations concerning passports and the impossibility of legally transmitting money out of the country for private purposes. The only ways to leave the Republic of Korea were either for business or to study. For a long while, the Republic of Korea is thought to have had the highest rate of students, of any developing country, who did not return home. The only people who possessed mobility were those businessmen involved in exporting.[36] In recent years it has been suggested that the appeal of the civil service is losing its attraction and the government is no longer attracting the highest quality recruits who now opt first for employment in the large conglomerates. If correct, then the social transformation of the Republic of Korea is complete.

If these features from the traditional heritage favoured the development of businessmen, Confucian respect for elders and betters and the low social status accorded to women provided an exceptionally docile labour force. Probably what is unique about Confucian societies is the distinctive character of their labour relations. Moreover although nationalist resistance to the Japanese was strongly associated both with trade unions and communism, and although after the liberation trade unions with very left wing overtones grew rapidly in South Korea, the experience of the Korean war and continuing fear of the threat from the North destroyed the respectability of most left of centre ideas round which an ideology of confrontation between employers and employees might have developed.

It should however be observed that neither in Japan nor Hongkong, where ideology is much freer, has the Confucian respect for the employer been damaged. At the same time it might be argued that the average Korean has a much more egalitarian view of the world than Japanese or Chinese, and there is a great suspicion about wealth and the assumption that wealth must have been gained illegally remains.[37] Hence when labour confrontation has occurred, it has been bitter, and government and employers remain nervous about the possibility of collective action emerging.

That is has not, has partly been due to the extremely constructive form of nationalism which prevails in the Republic of Korea. Prior to the Japanese occupation, nationalism was confined to a few intellectuals. During the colonial period when resistance to the Japanese was led by christians and communists both alien ideologies became popular. However, the distinctive character of Korean nationalism was created by Shin Chae-ho. Interestingly, Shin was the originator of both juche, the concept of self-reliance dominant in DRRK doctrine and chaju, the Park Chung Hee's concept of being master in one's own house. Shin combined traditional Confucian thinking with the concept of making the Republic of Korea not only independent politically and economically, but also important in a modern sense. Fortunately for both Korea's, he died before Liberation, but his thought encapsulates the basic philosophy of development in both Korea's.

In the confusion of the post-war period, the course of the Republic of Korea patriotism was shaped by a feeling that she was continually being robbed of her rightful place in the world. First through the Japanese seizure of the country in 1910, and then through the cold war which divided Koreans amongst themselves. Every post-Liberation school child was taught that in the Republic of Korea's "5000 years of history" the Republic of Korea had been the transmitter of civilisation to the Japanese. It was therefore unthinkable that the Republic of Korea could not do what Japan had done. Thus Japanese development acted as a bench mark throughout the development process.

As mentioned above, the Republic of Korea was also competing with the DPRK. Since 1949, the United States had encouraged the idea that the Republic of Korea could become the model of capitalist development. It would not only be successful economically but also socially so that the country would be objective proof that capitalism was more effective than communism.[38] As the DPRK appeared to be winning the race for development in the late 1950s, the Republic of Korea became even more concerned to achieve results. Indeed a major factor in the acceptance of Park Chung-hee's coup even by convinced democrats was that their desire for national development was stronger than their desire for democracy.

Thus throughout the period of rapid development Park Chung-hee was able to draw on a consensus amongst Koreans that development was essential. The population at large was prepared to make sacrifices in the long term interests of the nation in the same way that individuals were prepared to saddle

themselves with enormous debts so that their children could gain a good education and thus a better life. At the same time, Park Chung-hee attempted to restrain examples of conspicuous consumption or ostantatious displays of wealth in such areas as banning luxury motorcars, expensive weddings, etc.

Even the opposition showed grudging respect for measures which advanced the international standing of the nation, merely arguing that the levels of sacrifice were not equally shared between rich and poor. The degree to which this consensus for development provided a motor force during rapid development can hardly be denied. There would be few Koreans who argue with the opening statement of the National Educational Charter of 1967 to be found as preface of every government publication and every school textbook "We are all born into the nation charged with the historic mission of national renaissance ... only through cooperative effort can this task be achieved."

Along with this national desire to develop can be ranked a long exposure to industrialisation and industrial discipline. During the 1930s industrialisation in Korea, particularly in the north of the peninsula proceeded rapidly. An estimated three million Koreans returned to the Republic of Korea from Japan, DPRK and Manchuria after 1945, most of them with urban and even industrial experience. The wartime convulsions, mass conscription and the presence of large numbers of G.I.s and exposure to modern warfare gave even deeply rural areas an awareness of modern society.

Hence, by 1960, many of the initial barriers to development in developing countries described by Inkeles and Smith in Becoming Modern were removed.[39] Although television ownership was very restricted in the 1950s, the importance of the tabang or teashop with a television set as a meeting place portrayed images of Western countries, reinforced in the mid 1950s by the fact that after a fire had destroyed the Korean television station, the only broadcasts were those of the American Forces Network.

Finally, the succession of governments strong on central direction, and weak on the defence of individual's liberties, Colonial, American Military, Syngman Rhee accustomed several generations to authoritarian governments. A feeling of disorder during the brief periods of more open government merely confirmed a tolerance of strong government which foreigners often found hard to understand.

As a consequence of these forces it might be argued that unlike many African countries or even India, the Republic of Korea in 1960 contained a strong minority who were orientated towards development. In other words, the Republic of Korea in 1960 should be considered spiritually not as an underdeveloped country but a very very poor modern society with a strong desire to acquire the material benefits of Western civilisation. This part of society was of course urban, and one of the main designs of the Saemaul (or New Village) movement of the 1970s was to bring the same qualities to rural areas.

4.2 Institutions

Only in rural society did important institutions survive from the pre-colonial era and even these were of local importance. Since this study is concerned with modernisation and particularly trade and manufacturing it is not necessary to consider them. From the colonial period comes much of the administrative and the legal framework, the educational system and part of the financial system. The political system reflects the American occupation, as does the military, modified to meet Korean circumstances. Of non-government agencies only trade unions and religious organisations require attention at present.

The original post-Liberation constitution was modelled broadly on the American system with a separation of powers but on unicameral representation. The franchise was universal suffrage for both men and women adults. The Americans modified the system to allow a vetting of candidates to prevent left-wing candidates from standing.[40] In general the scrutiny of candidates has been an important system of electoral control since 1948.

In the second elections of the New Republic held in 1950, Syngman Rhee's party was heavily defeated, and to maintain his rule he strengthened the Presidential system at the expense of the National Assembly. The Second Republic in reaction created a Prime Ministerial system with two chambers, but this was overthrown in May 1961 and the Third Republic reverted to previous practice. In 1971 the Government party failed to gain the two-thirds majority required to pass constitutional amendments and the following year a new constitution, the Yushin constitution was passed which allowed for one-third of the Assembly to be appointed. At the same time direct election of the President ceased and a new Assembly, the National Conference for Unification was created to elect the President.

The Fifth Republic came into being in 1981 with the election of President Chun-Doo-whan for a seven year term, again through an electoral college. The appointed members of the Assembly were replaced with a proportional representation list system.

The consequence of these frequent changes, combined with the importance attached to the administration has led to the National Assembly playing a small part in national life compared with Western democracies. It retains the power to pass budgets and confirm the appointment of major government officers and to cross examine officials.

The importance of the President and his staff is obvious, but the status of the bureaucracy is a distinctively Korean feature. Government ministers are only rarely elected members of the National Assembly and frequently senior bureaucrats who have worked their way through the system. The actual size of the central Korean bureaucracy is extremely small, about 12,000 in the mid 1970s.[41] In Chapter III, it will be seen how this small size is extended through the extensive use of semi-government organisations.

Despite the small size of the bureaucracy, it is highly independent. Inter-ministerial rivalries are sometimes intense, and during the 1950s it was even claimed that each ministry was virtually a separate government. To control this, Syngman Rhee tried to prevent any senior official staying in any office more than a few months to stop him developing his own power base. The transition to a more stable system under Park Chung-hee therefore immediately assisted towards a longer view of development.

At the same time in the absence of a strong representative tradition in the National Assembly (National Assemblymen, although elected by constituency do not normally try to represent their constituents in a British or American sense) the Ministries see themselves as the representatives of their constituencies, farmers, traders, industrialists, transport operators, etc.[42] The importance of the bureaucracy will be considered in further detail in Chapter III.

From an organisational point of view the ministerial structure broadly ressembles the Japanese system rather than western organisations. This is only partly the legacy of the colonial administrative system, further additions such as the Ministry of Construction have been added later, while

nothing in the Japanese system ressembles the Economic Planning Board in its strength to enforce its decisions.[43]

The financial system reflects the colonial heritage even more strongly. The central bank is the evolutionary descendant of the Bank of Chosen. A marked feature of the system of development has been government direction and rationing of credit. In this the tradition of government special or development banks (classed as specialised banks in the Republic of Korea) initiated in the Meiji period and founded in the Republic of Korea after 1906 is important. It was further assisted by the seizure of the commercial banks from private ownership in the early 1960s on the grounds of reclaiming illicit wealth.[44]

The legal system is based on the codification of Yi dynasty law by the Japanese modified by the Meiji criminal and civil codes, themselves based on German and French models. There is however a strong Confucian tradition that to go to law over a civil matter is unseemly and it is true to say that Korean commercial law is still very underdeveloped with many grey areas.[45]

The educational system of primary, middle and high schools with a dual track system of vocational and academic higher education owes its origins to the colonial system, though until very recently the academic side has been more important and the vocational system much less important than in Japan or colonial Republic of Korea. Many of the 35 universities date back to the colonial or even pre-colonial period as missionary or private schools subsequently raised to university status. The prestigious Seoul National University is the former Keijo Imperial University, the only university existing prior to 1945. As might be expected even private schools are closely controlled by the State with carefully prepared textbooks which have served to reinforce the national determination to develop the Republic of Korea rapidly.

It should however be stressed that despite the immense value placed on education in the Republic of Korea, the actual quality, as opposed to quantity has not shown marked improvement in many areas. Although the number of students per class in primary schools has fallen from 60 in 1962 to 45.5 in 1981, that in middle school has risen from 60.1 to 64.9, and in vocational high schools from 51.2 to 58.4. Class size has been static in general high schools for the past twenty years. With classes of this size, learning by rote has been inevitable, and the amount of attention per child very limited.

Consequently to ensure success in the university examinations an incredible network of private tutorships existed until 1980 which nearly every high school child aiming at university attended.

Of all the institutions in the Republic of Korea, the least studied is the military. The Korean war and subsequent threat from the DPRK has led to the maintenance of the sixth largest army in the world and a rather smaller navy and airforce. The military establishment clearly ought to play a decisive role in the government if its influence corresponded to its size. Both Park Chung-hee and the present President were generals when they came to power, but subsequently stepped down from their military rank when formally becoming President. At the same time both in the early 1960s and 1980s, large numbers of generals were removed from their positions and usually found government or quasi-government offices.

Apart from the early 1960s and the present time, military backgrounds have been rare in economic areas. Generals were much more likely to become diplomats or National Assemblymen. An outstanding exception is Park Tae-jun, a former major-general, who founded the government owned Pohang Iron and Steel Company (POSCO), generally considered to be one of the most efficient enterprises in the Republic of Korea.

Since 1980 there is an impression that men with a military background are playing a much larger role in the Government than at any time since the early 1960s, but this is either at ministerial or enterprise level. The control of the economy and finance remains firmly in the hands of the professional bureaucrats and so called technocrats who have no professional military background, except as low ranking conscripts.[46]

Universal conscription was introduced in 1950. It has been argued that particularly in the 1950s and early 1960s the period of military service played an important educational role in taking young men from their villages for the first time and giving them experience of modern discipline, rudimentary machinery and the outside world. Likewise it has been argued that at the time of the military coup of 1961 the military were the most modern organised group in the country.[47] Neither argument has the same force in the 1980s. In particular since the age cohort of military age are now in excess of military requirements, men with very low educational attainments are relegated to home defence corps duties. Likewise the sophistication of the

Korean economy by 1980 prevented the useful transfer of military personnel to commercial appointments.

Considering the homogeneity engendered by a lack of racial and cultural minorities and a centralised educational system, the Republic of Korea is surprisingly pluralistic in matters of religion. There is no state or even quasi-state religion. Buddhism, the leading religion in terms of adherents, was disestablished in 1392, and unlike Japan, Christianity has taken very strong roots. Indeed in the early 1900s, missionaries were beginning to talk hopefully of the first Christian nation of the East. Christians are still an arithmetical minority, but more organised and wealthy than most other groups.

Other groups include Confucians, indigenous Korean religions from the 19th century such as Tonghak to the modern "Moonie" cult, and a strong persistence of Shamanism which is essentially animistic.[48]

From the point of view of development forces the Christians have probably been the most active group from the launching of the 1919 Independence Movement onwards. They are also the group most interested in economic and social development. The Catholic Farmers Association forms the most influential non-government agricultural organisation and a collection of different groups have taken an interest in the conditions of workers. Of these, the Urban Industrial Mission continually hits the headlines in a negative sense, being frequently blamed for labour unrest.

Trade unions had their origins in the colonial period and came into their own during the period of the People's Committees during 1945 and 1946. They were at that time plant unions organised on a national level for political reasons. Syngman Rhee soon put a stop to that, and unions are proscribed from political activity while turned into organs of the ruling party. It was natural for the Government to wish to control unions and in 1967 it was possible to publish a book stating "these unions are so dependent upon the Government that they even work as a goon-squad for a political party in power. Their purpose for existence is not so much as an endeavour for better working conditions of higher wages, but as a pawn in the hands of the so-called union leaders".[49] In the next two years the unrest amongst the rapidly growing industrial labour force was high. The characteristic labour dispute begins at plant level, rather than from the national leadership, and has not infrequently been aimed against the union leadership itself. The

growing unrest in the late 1960s was curbed by Presidential Decree under the Emergency Decree of December 1971, and the next era of general unrest was in 1979 to 1980 when government controls were relaxed. 1982 has also been relatively eventful, and this may be an unexpected consequence of the new labour laws of 1980 which weaken central control over branch unions.[50]

The Unions therefore are certainly not tame instruments of the Government at local level, but operate under extensive constraints and active union officials have often found themselves in the position of choosing between allegiance to their members and pressures from the centre.

5. Preliminary appraisal

Contemporary observers in the late 1950s and early 1960s saw few signs that the Republic of Korea would suddenly develop at the fourth most rapid rate in the world. As has been argued above, this growth did not come from a single continuous source. It will be demonstrated that exports played a very limited part in the transition from low growth to high growth, but that in the second stage they took over as the leading sector. In more recent years there have been signs of a more balanced growth, curtailed by a dramatic change in government policy in 1980.

It will be seen from table 1.6 that the Republic of Korea has also been unique amongst rapidly growing countries in experiencing a very high rate of inflation, though modest by the standards of Brazil or Israel. It will be argued that inflation has been intrinsic to Korean development and that it is still too early to say whether the current government policy which starts from achieving a low inflation rate allows for the way that structurally every economic activity has been adapted to high rates of inflation and must now adjust to low rates.[51]

In 1978, an average growth rate of 10 per cent throughout the 1980s was forecast, which, using a misleading formulae for converting won to constant dollars argued that by 1991 the Republic of Korea would have reached the 1975 per capita income level of middle income developed countries such as The Netherlands.[52] In fact, the Republic of Korea would have had to have achieved such a high rate merely to reach the level of the leading NICs.

Table 1.5 The fastest growing countries
(excluding Oil States)

Country	Per capita GNP (1979 $)	Average GNP Growth rate 1960-79	Average annual Inflation 1960-70	Growth rate 1970-79
Japan	8,810	9.4	4.9	8.2
Rumania	1,900	9.2	-0.2	0.8
Singapore	3,830	7.4	1.1	5.5
The Republic of Korea	1,480	7.1	17.5	19.5
Hongkong	3,760	7.0	2.4	7.9
Greece	3,960	5.9	3.2	14.1

Source: World Bank, World Development Report 1981.

With per capita income standing in 1981 just below the level at the end of 1979, the Republic of Korea would have to grow even faster in the 1980s. The projected growth rate contained in the Fifth Five-Year Plan is 7.8 per cent, but growth in 1982 will be under 6 per cent.

This should be taken as a measure of the problem of all developing countries. Most of the 67 countries with a per capita income below 1,100 dollars would be happy to reach the level of the Republic of Korea in 1980, a level in which the distribution of income is still commendably equal compared with many developing countries. But for the Republic of Korea to come from a level which in 1960 was still higher than that of about 31 of those countries today at constant prices has taken twenty years. It will take more than twenty more years to catch up with the slower growing developed countries, and of course, since Japan is growing faster than the Republic of Korea, if there are no limits to growth, it would be impossible to catch up.

The Republic of Korea's most serious problem is still the large percentage of the population in low productivity agriculture without a potential for further productivity gains per hectare. This population must therefore move into manufacturing and services, but the effect of the past two years has been to increase labour productivity and the capital intensity of employment. Each new job will therefore cost more to create, at a time when the labour force is growing rapidly. Consequently merely to contain the level of unemployment at present levels without providing for a shift from agriculture comparable to that between 1975 and 1980 will take high growth rates. This is more or less what the Fifth Five-Year Economic Plan projects.[53]

There are urgent urban problems whose solution will also divert capital from productive investment, notably road building to accommodate more motor cars and sewage and water systems. Finally, in order to continue rapid growth through exports, the Republic of Korea will need to develop new industries and new markets at a prodigious rate.

The Republic of Korea now has about 1 per cent of world trade, and an increase in exports is now a noticeable phenomenon especially at a time when protectionist pressures are rising. An important test case will be the motorcar industry, since the Republic of Korea has already followed most of the areas in which Japan has excelled. In general, however, the future growth potential may well be in the Republic of Korea's own domestic market which will soon consist of 40 million consumers, four times the size of Portugal, Greece, Belgium or Chile and twice that of Argentina.

Clearly the Korean experience has been highly individualistic, nevertheless it offers important lessons for other developing countries. When the Republic of Korea's experience is compared with other NICs, notably city states like Singapore and Hongkong, or very large countries such as Mexico and Brazil, its profile is closer to that of many developing countries.[54] A range of experience emerges which ought to be capable of development into a practical programme for many low income countries.

References

1. World Bank: World Development Report 1981, Table 1.

2. Only three other countries in this category are within 10 per cent of the Republic of Korea's population size, Egypt, Iran and Spain.

3. Though there were problems in the late 1960s and early 1970s.

4. The Republic of Korea inherited two urban classifications from the colonial period, eups between 20,000 and 50,000 and si above 50,000.

5. This is the U.N. estimate figure. It rests of course on official urban boundaries which do not reflect conurbations in many countries.

6. These laws were radically revised in 1980-81 and the anti-communist law subsumed in the national security law. The effect has probably not changed.

7. The fifth largest army is that of DPRK where the burden of supporting such an army has had very serious economic repercussions.

8. University of Oregon: University of Oregon Advisory Mission Report, Oregan 1961. (Mimeograph, p.2)

9. For a full discussion see my forthcoming "Government Economic Decision Making in South Korea", IDS Discussion Paper, IDS at the University of Sussex, 1984 (forthcoming).

11. For instance the work of Karl Moscowitz and Carter Eckhart on Korean entrepreneurs in the colonial period, as yet unpublished; and Bruce Cummings: The Origins of the Korean War, Princeton, 1980.

12. For a critique of the failure of the KDI series on the modernisation of Korea 1945-1975 to deal with this issue see Tony Michell: "The Transitional Economy: The Harvard KDI series on the Modernisation of Korea", Journal of Korean Studies, Seattle, Vol.4, 1982, pp. 295-313.

13. The influence of the cohort who began their training in Manchuria in post-1960 the Republic of Korea has not really been noted previously.

14. McGinn, N.F.: Education and Development in Korea, Cambridge, Mass., 1980, pp.11-12; Byung Hun Nam: "Educational Reorganisation in South Korea under the United States Army Military Government 1945-1948", unpublished Ph.D thesis, University of Pittsburgh, 1962. Under the Japanese, 45 per cent of the school age population attended Punang school.

15. Bank of Korea: Monthly Statistical Review, 1953 and 1954.

16. KDI: Korea's Economy: Past and Present, Seoul, 1975, p. 13.

17. The clearest indication of this is in the change in the proportion of imports to exports since 1949. In 1949 the ratio was 76 per cent, but by 1957 it was 9 per cent.

18. This reinforced an already existing tendency. It has been said "Rhee found subordinates who did too little preferable to those who might do too much", R.C. Allen, Korea's Syngman Rhee, an unauthorised portrait, Tuttle, Tokyo, 1960, p.102.

19. BOK: Monthly Statistical Review, June 1952, No.47.

20. For further discussion of this point see Tony Michell: "The Transitional Economy", Journal of Korean Studies, No. 4, 1983, pp. 295-313.

21. Park Chung-hee: First Five-Year Economic Development Plan, Seoul, 1961; My Country, The Revolution and I, Seoul, 1963.

22. Figures from McGinn et al.: Education and Development in Korea, 1981, p.48.

23. McGinn et al.: Education and Development in Korea, 1981, p.109. The 1944 data refers to the whole of the Republic of Korea.

24. Shareholding was markedly reduced, corporate companies being normally owned and managed by individuals.

26. This excludes 1962 when the harvest was so bad overall GNP growth fell to 2.1 per cent.

27. E.P.B.: Economic Survey 1966, Seoul, 1966, p.20.

28. A current account surplus had occurred in 1965 largely through import restraint and an increase in aid, tourism and government transactions on the invisible account.

29. For further discussion of policies adopted since 1979 see Tony Michell: "What happens to economic growth when policy makers shift their policies from Keynesian to Neoclassical principles: The Case of South Korea", IDS Bulletin, 13, pp.60-67.

31. One possible exception is the scale of World Bank lending. The Bank has been extremely keen to lend to the Republic of Korea. But by 1978 World Bank terms for loans were not so very much more favourable than the best the Republic of Korea could negotiate on the Euro-dollar market.

32. Public Record Office London, Foreign Office Papers 262/1804. British Consul General in Seoul, 1932.

33. Mason et al.: The Economic and Social Modernisation of the Republic of Korea, Harvard, 1981, p.3.

34. The Yi dynasty instituted competitive examinations for all civil service places in 1392. The traditional civil service came to an end in 1910. Competition for places was extremely fierce.

35. In the early 1970s there were frequently 100 applicants for every place, despite the fact that civil servants were paid much less than business men.

36. As late as 1978 civil servants were not allowed to leave the country at the same time as their wives for fear of their non-return.

37. This is presumably a heritage of both colonial and post-war periods. In the colonial period those who grew rich were collaborators while after liberation possession of import licences was one of the most important source of wealth along with corruption.

38. Senate Papers: Hearings concerning aid to China and South Korea, 1949.

39. A.Inkeles and D.H. Smith: Becoming Modern: Individual Change in Six Developing Countries, London, Heineman, 1974. The Republic of Korea is not one of the six countries studied.

40. In fact the left wing boycotted the elections.

41. Since 1975, the basis on which government employees are recorded makes tabulation impossible. The number has not grown appreciably.

42. For further discussion see Tony Michell: "Government Economic Decision-Making in Korea", IDS Discussion Paper, 1984 (forthcoming).

43. The E.P.A. is a much weaker organisation. Prior to 1953 however the E.P.A. had powers similar to those of E.P.B.

44. Several of these banks date back to the precolonial period, the earliest, the Hanil Bank dating from 1899.

45. Recent court decisions over the ownership of copyright for instance have done nothing to clear up uncertainty in what should be a fundamental case of commercial law.

46. Again an exception has been the involvement of a former general in the curb-loan crisis scandal of 1982.

47. Lee Hahn-been: Korea: Time Change and Administration, Hawai, East-West Center, 1968, pp.144-176.

48. The consultation of fortune tellers by people of all walks of life is common on matters ranging from marriage partners to the stock exchange.

49. Hahm Pyong-choon: The Korean Political Tradition and Law, Seoul, 1967, pp.160-1; Dr. Hahm went on to be a Presidential advisor to two presidents and an ambassador to the United States

51. Preliminary data for 1982 and 83 suggest a high degree of success in controlling inflation without constraining growth.

52. KDI: Long Term Prospects for Economic and Social Development 1977-91, 1978, pp.1-16.

53. EPB: Fifth Five-Year Economic Development Plan, 1981, pp. 7 and 170-172.

54. The one major difference is the very high population density. It could be argued that in most respects this is a disadvantage.

CHAPTER II

THE ECONOMIC DEVELOPMENT OF KOREA

1. Development objectives, plans and strategies

1.1 The pre-planning period

Between 1945 and 1966 the basic goal of the Government was to create a stable, viable economy out of what was successively a part-economy, a war ravaged economy and a stagnant economy with imports running at twenty times exports. From 1966-1982 the strategy changed to overtaking North Korea, and achieving a high level of development, and since 1976 to be a developed nation by the end of the century. Throughout this process there have been ambivalent attitudes to such problems as promoting industry at the expense of the large rural population, allowing foreign capital to own a large proportion of Korean industry and to the degree of openness the economy should have.

Pre-Korean War plans aimed primarily at solving the balance of payments and fiscal problems. A recurrent myth was that because the Republic of Korea had exported so much rice in the colonial period, it could sustain substantial rice exports. The rice exports had only been achieved at the cost of reducing nutritional standards of Koreans, which was possible in a controlled colonial economy, but not in an independent one made up largely of peasant farmers.[1]

Near the end of the war, the U.N. commissioned Robert Nathan and associates to draw up a plan which would restore output to its 1949 level. Unfortunately, Syngman Rhee was never consulted, and the plan was never adopted by the Korean Government. Nathan correctly identified the Republic of Korea's strength as its labour force and ancitipated the growth of manufactured exports. However neither the Korean Government, nor the aid donors (principally the United States) had any real concern for some of the imaginative ideas in the Nathan plan. The Koreans were concerned with reconstructing the economy, and with balancing the budget, the Americans were interested in pushing United States surplus items and bolstering up the country against communism.

It should be remembered in evaluation the very large amounts of aid that the Republic of Korea received in the 1950s, that United States aid in the 1950s was conceived in very different terms from the later 1960s and 1970s. As Allison, the United States Ambassador to Japan wrote "during the Dulles period economic and purely political activity took second place to the building up of a strong military base, which it was believed would deter further communist expansion in Asia."[2] Syngman Rhee's aim throughout the 1950s was to get more aid in the form of money and less in kind. The United States favoured donating commodities which could be sold in the Republic of Korea and the proceeds used to subsidise the budget and aid programmes. Moreover the advisors put great emphasis on stabilisation policies which involved holding down agricultural prices.

Rhee himself seems to have been unconcerned by the slow pace of planning and development, being more concerned with political manoeuvring rather than long term economic development. Thus the development of an economic plan from 1958 to 1961 proceeded in a very desultory fashion. In view of the deadlock between the Korean Government and the United States aid donors there seemed little urgency in completing it. Meanwhile the economy slowed down as the stabilisation policy increased rural poverty, although industrial capacity increased as new plants were built in areas such as textiles, fertilisers, and iron and steel.[3]

The Democratic Government which came to power after the April Revolution also placed political stability above economic growth, hoping to introduce the first plan in 1961. A draft was available to be adopted hurriedly by the new military Government in June 1961. Park Chung-hee, who emerged as leader, made economic development a basic platform of the military regime, attacking previous governments for the country's economic ills including the "lack of long range planning".[4] As Cole and Lyman write "the most significant political development in the economic policy of the Park administration as it developed after 1963, was that economic policy became the central thrust of the regime's entire political effort at home and to a certain extent abroad ... concrete economic performance became the touchstone of political performance and national progress."[5]

1.2 The First Plan 1962-1966

In economic terms the First Five-Year Economic Plan 1962-1966 was a slight document. The long preamble was concerned with an attack on the previous government, attached to ambitious targets for each sector, withspecific investment projects enumerated. The basic goal was "self-sustaining growth of the national economy for a better standard of living in the future", "to provide or prepare a springboard for economic progress" or to establish a "period of preparation for industrialisation".[6]

The basic aims were:

- to achieve self-sufficiency in food production;
- to reduce imports through substitution;
- to increase exports;
- to decrease dependence on foreign aid by increasing saving if necessary by austerity measures;
- build up infrastructure and by-pass bottlenecks;
- reduce unemployment.

Inadequate statistical material was available to build a proper model of the economy.[7] In some respects this proved advantageous since the much more sophisticated adjusted plan of 1963 which established "the limits of the Korean economy, while at the same time adjusting the growth target to a more realistic level" proved much less accurate.[8] As Lewis observes "mathematical exercises do not of themselves produce truth."[9]

However, if the growth target of 7.1 per cent per annum of the first plan was near to the actual growth rate of 7.8 per cent, as far as planning procedure was concerned it was more luck than judgement. Indeed the Government decided late in the process to raise the target to 7.1 per cent from the draft 6 per cent without adducing any additional reasons or policies.

The first plan therefore introduced some of the aspects of economic planning which have continued to the end of the fourth. First the manipulation of growth targets for political purposes. Second the degree to which the Government was willing to use every measure within its power to achieve economic growth. The plan was criticised as lacking any measures

which would ensure the prescribed growth rate. Indeed in the area on which the Government pledged most faith, the drop in consumption to provide additional savings and the growth of foreign savings (as opposed to aid) the plan notoriously overestimated the growth rate. Fortunately the incremental capital-output ratios had also greatly been overestimated. Moreover, no one had calculated either the degree to which factors of production in the economy were underutilised in 1960, nor the responsiveness of peasant farmers to market incentives.

It is important to note that a thorough reform of the Government structure had preceeded the introduction of the plan. There had been a purge of corrupt officials, followed by the creation or strengthening of the overlord ministries, the Economic Planning Board with planning, budgetary, economic co-operation and co-ordination functions, the Ministry of Commerce and Industry charged with promoting industry, curbing imports and increasing exports and later, in 1963, the Ministry of Construction which was to oversee the creation of the physical environment for the development process.

Equally important the Government appropriated the major banks and modified or created additional specialised banks which would handle foreign loans and domestic credit. In implementing the succesive plans, control and direction of credit has been the Government's most important instrument. In order to achieve this completely it was, however, necessary to make sure that funds flowed through institutional forms of credit and not through the disorganised curb or unofficial money market. Between 1962 and 1965 a number of monetary experiments were conducted, all of them limited by a desire to keep interest rates low, whereas the unofficial market reflected supply and demand more accurately.[10]

In 1965 under the advice of Gurley, Patrick and Shaw, the simple expedient of raising the real interest rate from negative to positive across a wide range of accounts was adopted, from 9 per cent to 20 per cent.[11] The effect was instant and beyond the expectations of the reformers. Time and savings deposits increased by 25 per cent in one month, tripled in the first 12 months, and doubled again in the following 12 months. The increase in deposits alone, equalled 5 per cent of GNP in 1966 and 6 per cent in 1967, whereas in the three years prior to the reform real savings had not increased at all.

The initial effect was the result not of new savings, but a transfer of resources from the unofficial to the official sector. This was precisely what was required to finance future investment according to Government direction. Kim Kwang-suk has argued that the overvalued won was "a factor of considerable importance in explaining the Republic of Korea's economic performance in the 1950s". It encouraged imports which were controlled by licenses which were highly profitable to license-holders and the Government which sold the licenses, which Krueger believes "constituted a major distorting infuence within the economy".[13]

Again major experiments in exchange rates and import controls were conducted between 1960 and 1964, but in 1964 the basic policy which continued for ten years of adjusting the exchange rate to allow for a differential inflation rate in the Republic of Korea, and which controlled imports for the domestic sector while allowing free imports for exports was established (see Appendix, Table 1 for exchange rates). It is important to note that these policies evolved by trial and error after high growth rates in 1963 and 1964 had been achieved, and the "take off" was not dependent on these policy reforms, rather the policy reforms sustained the initial growth.[14]

Little has been said about exports in the First Plan. Indeed the section in the draft plan which listed the measures that might be adopted to promote exports was dropped from the final version. But soon after the military assumption of power, monthly export promotion meetings began to be held in the Ministry of Commerce and Industry, presided over by Park Chung-hee. Later these meetings became a matter of report, but in the early stages the direct oversight of the holder of executive power allowed instant decisions to be made. Indeed throughout the development process the speed of decision making has been a characteristic of the Korean Government.

A comprehensive battery of measures to encourage exports and to allow them to compete on free market terms was established (See Appendix Table 2). As will be seen later in the work, these measures creating the environment for freer trade were undoubtedly important, but in the Korean case Government intervention, exhortation and promotional activity went far beyond merely creating the conditions under which exports could develop freely.[15]

1.3 The Second Plan 1967-71

By 1965 preparations for the Second Five-Year Development Plan 1967-71 were well underway. As a piece of economic planning the second plan is perhaps the most impressive of the five Korean plans. It was able to draw on the first input-output tables (for 1960 and 1963) which had ever been compiled for the Republic of Korea which allowed the linkages to be evaluated much more precisely.

The second plan was based on round population projections which showed that employment would have to be expanded rapidly to prevent an increase in unemployment during the 1970s as the post-Korean war generation reached maturity. It was clear that a further expansion of the agricultural sector would be unlikely, and manufacturing appeared the obvious area for development. In the first plan export promotion had been essentially a shot in the dark. In the second plan it was a question of building on firm foundations. The second plan therefore put much greater emphasis on an export-led strategy, encouraging foreign investment in areas where labour intensive manufactures could be developed, notably electronics.

At the same time import substitution remained an important goal. Industries which did not have immediate export prospects but which would save foreign exchange and increase self-sufficiency were programmed including fertiliser plants, oil refineries, cement, and the early petro-chemical plants. Against international advice an integrated iron and steel mill was also planned.

In the case of import substitution the basic nationalistic policy of self-sufficiency won against the arguments of the foreign advisors and enthusiasts for a more open economy. However, in the bitter debate over balanced or unbalanced growth in which the nationalist school of thought argued for rural industrialisation and the dispersal of industry while the other side argued for economies of scale and allowing market forces to dictate location of industry even if all of it was sited in Seoul, the nationalists lost.

It is questionable whether the Korean Government got value for money out of its foreign consultants. The integrated iron and steel mill started in

	Unit	1962		1966		1971		1976		1981		1986
		Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned
Gross National Product	in 1980 Prices, million U.S dollars	10,324	12,607	13,746	18,060	23,316	28,717	41,592	36,509	66,877	61,010	90,000
Population	1,000 persons	26,136	26,513	29,185	29,436	32,429	32,883	34,345	35,860	38,807	38,723	41,839
Per Capita GNP	in 1980 prices, U.S dollar	395	477	471	613	719	873	1,211	1,297	1,723	1,575	2,170
Industrial Structure												
Agri., Forestry & Fishery	%	37.1 1)	36.6	34.8 1)	34.4	34.0 2)	27.0	22.4 3)	23.8	18.5 4)	18.1	14.9
Mining & Manufacturing	%	19.4	16.3	26.1	20.2	26.8	22.4	29.9	28.4	40.9	30.6	32.6
SOC & Other Services	%	43.5	47.1	39.1	45.4	39.2	50.6	49.7	48.6	40.6	51.3	52.4
Commodity Exports	billion U.S dollars	0.66 1)	0.54 1)	1.38 1)	2.09 1)	5.5 2)	9.74 2)	35.1 3)	47.3 3)	202.4 6)	210.0 6)	530.0
Investment Ratio	%	20.1 1)	12.8	22.7 1)	21.6	19.9 2)	25.2	24.9	25.5	26.0 4)	31.2	32.5
Ratio of Domestic Savings	%	3.7 1)	3.4	13.0	11.8	14.4	15.4	21.5 3)	23.1	26.1 4)	22.3	29.6
Employed Population	thous. persons	8,497	7,662 5)	10,011	8,423	10,371	10,063	11,792	12,556	14,765	14,037	16,268
Employed Structure												
Agri., Forestry & Fishery	%	66.1	63.1 5)	64.6	57.9	58.4	48.4	37.7	44.6	39.7	33.1	27.1
Mining & Manufacturing	%	9.4	8.7 5)	10.7	10.8	12.4	14.2	20.5	21.9	26.1	22.3	25.2
SOC & Other Services	%	24.6	28.2 5)	24.7	31.3	29.2	37.4	41.8	33.5	34.2	44.6	47.7
Unemployment Ratio	%	22.3	8.2 5)	14.8	7.1	5.0	4.5	4.0	3.9	3.8	4.8	4.0

1) 1961 prices 2) 1965 prices 3) 1970 prices 4) 1975 prices 5) 1963 Employed Population 6) 1981 prices

Source: EPB, Fifth Five-Year Economic and Social Development Plan 1982, Seoul 1981. pp. 176-177.

1968 was the outstandingly sucessfull POSCO plant, while cement went on to be an import export commodity. In the debate over the potential rate of export growth the Ministry of Commerce and Industry argued for a high rate, while others, mainly consultants, argued this was too high. The subsequent compromise of 21 per cent proved too low.

The third major issue was whether domestic machinery manufacturers were to be encouraged to expand or whether imports were to be encouraged. As Cole and Lyman state "despite statements at various points in the Second Plan about the importance of building up the machinery sectors, which were designed to appease nationalistic sentiments, the investment tentatively earmarked for them was not very large and much of it was expected to go into electric and mechanical appliances for the export and consumer markets, rather than the heavier machine tool industries".[16]

The essence of the planning mechanism allowed bottlenecks to be forecast and investment scheduled to overcome them. With intermediate goods the point at which domestic demand would reach a level where investment was justified could also be forecast. One major policy shift was away from railway construction and towards motor transport as a result of a comprehensive transportation study by the World Bank. This study categorically concluded "no more railways should be constructed".[17]

From the time of the adjusted first Five-Year Plan of 1964 an annual economic review had been instituted which allowed modifications to be made to the basic plan according to developments in the past year. This was known as the Overall Resources Budget (O.R.B.). This introduced more flexibility into the planning process and allowed new projects, such as the Seoul-Pusan expressway to be introduced.

The second plan was successful in increasing the export sector and in laying the further foundations of industrialisation, but as Table 2.1 shows, the percentage growth of manufacturing value added was inferior to the first plan, as was the rate of growth of exports, although the overall GNP growth rate was nearly two percentage points higher. As will be seen, the absolute number of new jobs created in manufacturing was also disappointing.[18]

The worst criticism of the second plan was that it neglected the agricultural sector, so that the differential between rural and urban household incomes increased rapidly and caused a massive migration to the cities. Shanty towns multiplied on the edges of the major cities, while unemployment amongst new migrants was high.

1.4 The Third Plan 1972-76

If the second plan had seen a triumph of market forces over nationalistic sentiment, the third plan was to see a return to political rather than purely economic principles (or a triumph of nationalistic thinking). Adelman and Westphal put it even more graphically. "the Republic of Korea's Second Five-Year Plan was probably exceptional among development plans in the use of comprehensive development planning techniques and in the degree of Government participation in its formulation. For reasons that will be developed in the course of this paper, the Korean Government gave up comprehensive planning when preparing the Third Five-Year Plan."[19]

The essence of the authors' argument is that comprehensive planning aims at exploring the consequences of balanced, consistent and efficient growth. "The actual growth process, if it takes place, is unbalanced, inconsistent and inefficient."[20] Implicitly the semi-managed nature of the Korean economy is blamed for not adjusting to market signals which resulted in adjustments to imbalances in economic growth occurring "through an admixture of quantitative rationing of scarce resources, administrative allocation of targets and tinkering with covert adjustments to official prices."[21]

Finally "by 1970 the very success of economic growth had generated (a) demand for more political participation in plan formulation, (b) latent demands for a wider distribution of the economic benefits of accelerated growth, (c) imbalances among demand and supply of key resources leading to a resurgence of inflationary pressures and to potential pressures on foreign exchange balances, (d) vested interests in the perpetuation of the imbalances and (e) a general feeling by top policy makers that the only way these economic imbalances and demands for greater participation could both be accommodated simultaneously was through greater reliance on centralised control of resources allocation."[22] As a result although the Korean economy was much more complex in the 1970s, and the use of planning less sophisticated, Government control and direction of the economy increased.

The basic concept enunciated in the third plan was "the harmonisation of growth, stability and balance" with the continued rapid expansion of exports alongside the attainment of a "viable independent (my italics) economic structure" which was to include "innovative development of the economies of farm and fishing villages" with a return to the First Plan's emphasis on self-sufficiency in major food grains. At the same time the industrial industries, as well as improving scientific, technological and manpower development.

The plan also contained detailed social goals, the balanced development of power supply through rural electrification and development of the transportation and communications systems, the acceleration of regional development and the optimum dispersion of industrial manpower. Social security and public welfare systems were to be instituted since this was to be the plan dedicated to "improving the quality of life of workers".

The third plan was therefore more ambitious than the second. The second had aimed at maximising economic growth, the third aimed at high economic growth while harmonising the various problems that unbalanced growth had created.

Simultaneously with the third five-year plan, a National Land Development Plan which was to last ten years was introduced. For a country with such a high population density, a national physical development plan was an obvious step. The Presidential order to draw up this plan had been given in 1963 and in a country in which the decision making process is normally rapid, the delay in adopting a physical plan indicates unusually strong conflicts of interest.[23] It was not until December 1968 that the basic guidelines were drawn up. The history of the development of the land use plan is a reminder that even the Republic of Korea, without strong regional differences compared with most LDCs found it much more difficult to make a regional plan than to frame national policies.

The basic aims were fourfold:

(a) The dispersion of industry away from Seoul,

(b) Expansion of rural development and market integration which was termed the "foundation of development".

(c) Enhancement of the efficiency of land use and management.

(d) Development of land resources and conservation and protection of nature.

The dispersion of industry from Seoul was a major priority. In 1970, it was estimated that 45 per cent of industrial output emanated from the capital, and a goal of 29.9 per cent was set for 1981. Although the exact figures are not available, this goal was approximately reached. The method used was the development of industrial estates and large industrial plant along the south-east coastline. The process had already begun at Pohang with the location of POSCO. At Ulsan were located shipbuilding, petrochemical and motor industry plants, at Pusan large manufacturing complexes, at Masan an export zone and subsequently major machinery complexes at Changwon and further west petrochemical plants and refineries (see Map 2.1).

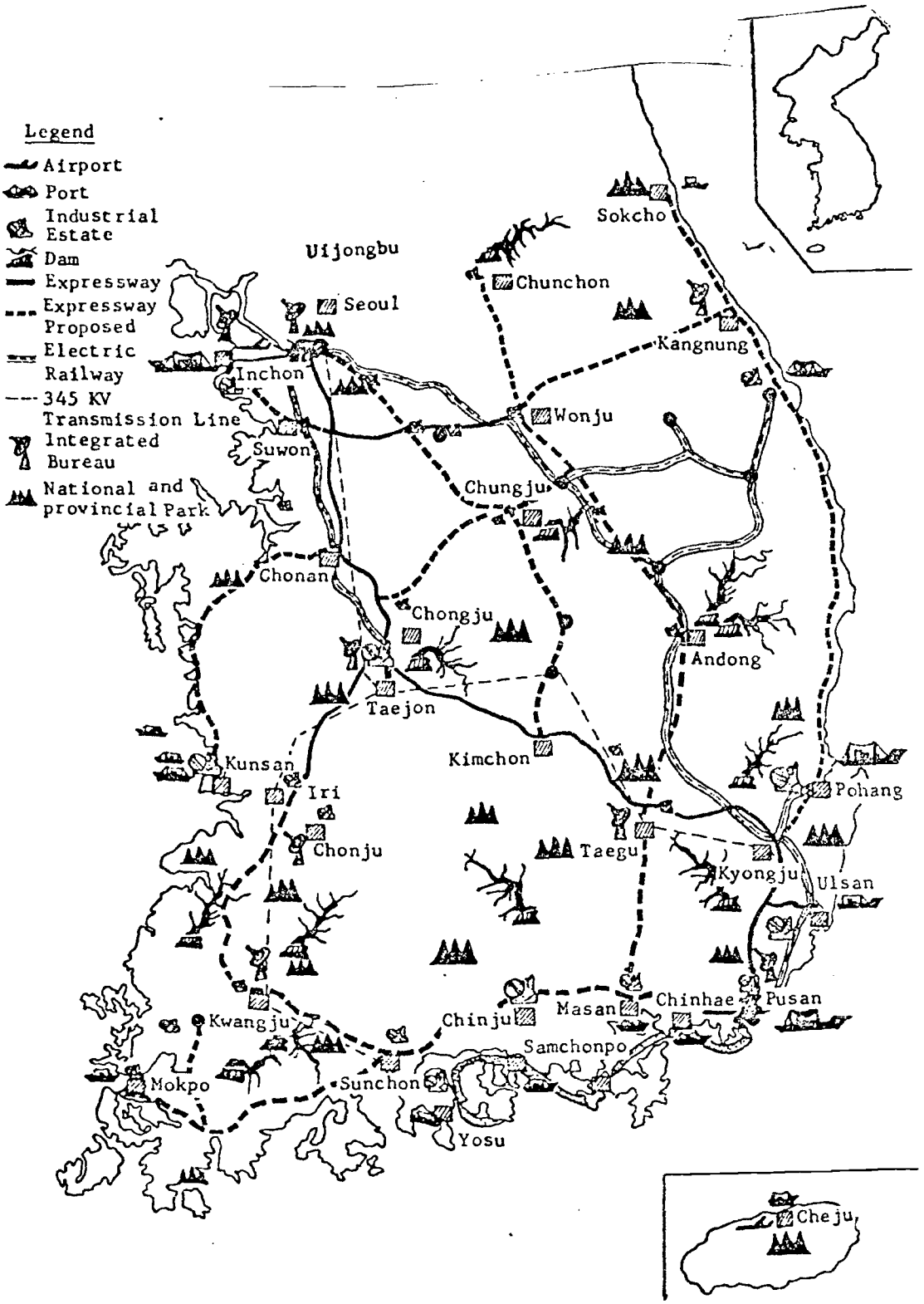
Despite the fact that balanced growth, rather than maximum growth, was the aim of the Third Plan, the economy grew more rapidly between 1972 and 1976 than between 1967 and 1971. To a considerable extent this was the result of the time lag between plan and implementation. This will be discussed in section 2. The time lag meant that policies and programmes introduced under the preceeding period were still producing their maximum effect after the plan had finished, while new direction were taking time to work through the economy.

Thus as Table 2.2 shows the domestic economy was slowing down drastically in 1972 and appeared to be negative, while exports were continuing to increase. The high degree of social unrest or potential unrest led to an acceleration of policies which would rectify this. One was the Saemaul Undong (New Village Movement) launched in 1972 which was to aim at the rapid modernisation of the countryside, the other was the Heavy and Chemical Industry Plan of 1972. The latter set out new targets for all areas of heavy industry and was put under the direction of the Heavy and Chemical Industry Committee based in the Presidential Offices. Thus for instance the target for shipbuilding capacity by 1976 in the third plan was 1.3 million gross tons, but the actual capacity achieved under the new plan was 2.6 million gross tons.

Unlike the third plan itself, the Heavy and Chemical Industry Plan was not drawn up by standard economic planning procedures, but by reference to the

industrial structure of more advanced countries with scant regard for comparative advantage.[24] The investment requirements were by no means accurately calculated, nor the economic efficiency of investment in capical intensive industries at this stage of the Republic of Korea's development. It was also assumed that the Republic of Korea could profitably export capital intensive industrial products on scales which were determined by internal factors rather than world market conditions.[25] From a locational point of view, the Heavy and Chemical Industry Plan gave a specific content and scale to the industrial estates planned in the National Land Development Plan.

Figure 2.1: Map to illustrate the First National Land Development Plan 1972-1981



When the third plan and the Heavy and Chemical Industry Plan were drawn up, no one envisaged the oil crisis of 1973-74. The Republic of Korea has been widely praised for the politics adopted during the crisis.[26] No attempt was made to cushion consumer or industrial prices. The belief was that immediate exposure to the changed world was desirable, but at the same time easy credit was available to stockpile inventories and keep new investment proceeding. The Government was assisted by the small part oil played in ordinary Koreans' lives, the increase in rural incomes resulting from high grain support prices started under the third plan, and the fact that wages kept pace with inflation. Hence domestic demand held up in 1974 when exports were badly hit.

Two new strategies were adopted as a result of the oil crisis. The first was the growth of labour exports for construction, especially in oil rich countries, backed up by Government diplomacy. The second was the vigorous exploitation of new markets. This was pursued through diplomatic means and by creating General Trading Companies paralleling aspects of the sogo shosha of Japan. Essentially this was an attempt to convert Korean exporters from passive to active exporters. Most exports prior to 1974 had been through non-Korean importers. Now Korean branches overseas were to attempt to take over this role.

1.5 The Fourth Plan 1977-81

The fourth plan was drawn up during the tail end of the oil crisis. The hands of the planners were tied by the continuing Heavy and Chemical Industry Plan and the Saemaul Movement. Moreover the political goal of eliminating further foreign direct investment was added. The aim was to have the domestic savings ratio exceed the investment ratio by 0.1 per cent by the end of the plan period. It was predicated on both a current account and trade surplus and, of course, a rapid rise in domestic savings. It also marked an important change of direction from the policies of the late 1960s regarding foreign investment.

The industrial structure was to be "deepened", by an increasing share of GNP from manufacturing and an increasing share of industrial value added coming from heavy and chemical industries. The prediction that by 1981 39.7 per cent of GNP would come from industry reflects an interesting blindness to the service sector. Although many areas of the tertiary sector were greatly

in need of overhaul and nowhere more than the financial sector, little attention was given to these areas. It was correctly foreseen that the agricultural contribution would decline slowly to 18.5 per cent in 1981, but also assumed that the service sector would decline from 46.5 per cent to only 40 per cent.[27] There was no model or recent historical experience of any country undergoing industrialisation which lent support to this projection, although the tertiary sector had declined during the first half of the 1970s. The Republic of Korea, by 1976, had reached the industrial structure of a number of developed countries at the start of the 1960s, the point where the services sector might be expected to increase.

To further strengthen Republic of Korea's self-sufficiency, the ration of R & D expenditure to GNP was to double, as increasing investment was made in research to develop more sophisticated products. The Government was supposed to make fewer interventions in the economy, administrative procedure was to be overhauled and subsidies phased out. Corporate management was to be improved, alongside enhanced management/labour cooperation, new fair trade practices and increased industrial information services.

Under the fourth plan, the Republic of Korea was therefore attempting to do mutually contradictory things. It aimed at increasing integration in the world market, but to exclude foreign capital; to increase savings while keeping interest rates for industrial investment low; to reduce Government involvement and phase out subsidies, while making massive subsidies and central direction under the Heavy and Chemical Industry Plan. Although the social welfare legislation envisaged under the third plan had reached the statute books in 1973, its implementation was suspended because of the oil crisis, and the fourth plan did not project implementation during the fourth plan period.

No one foresaw that the success of overseas construction would result in a current account surplus ahead of schedule in 1977, and instead of phasing out foreign capital and revaluing the won, it was decided to liberalise imports. One reason for this was the inability of the financial structure to accommodate an inflow of dollar remittances from overseas construction workers without the central bank issuing more currency.[28] The liberalisation of imports was only achieved after a bitter debate and the balance of opposing forces was so even that the implementing Ministries of Commerce and Industry and Agriculture were able to liberalise only imports which were

non-competitive or of minor value. Adopting import liberalisation, while beneficial in principle for the economy, meant that the goal of achieving a trade surplus in the Fourth Plan, which was very close in 1976, was totally abandoned.

Unfortunately the increase in the deficit was greatly augmented by the new oil price increases of mid-1979. Thus by the second year of the plan there had been major shifts in goals and policies. These were to increase as concern about inflation mounted in 1978, and to lead to a major re-evaluation of the basic framework of economic policies in 1979 and 1980.

From the moment the first plan enunciated the principle of "guided capitalism" until 1978, Korean economic policy was clearly at variance with many of the principles of neoclassical economics. The goal of self-sufficiency so often repeated in the first, third and fourth plans had no meaning in neoclassical terms, though it was self-evident to every Korean that it must be beneficial to the nation as a whole. Macropolicy in as far as it resembled any mainstream economic theory it may be described as "Korean Keynesianism". Its major justification was that it delivered growth. But with middle class concern about inflation increasing, and United States trained economists, out of sympathy with the tried and trusted methods, in positions of responsibility, a major shift towards monetarism was made in 1979.[29]

Interest rates were increased greatly in January 1980 and the won, which had been pegged against the dollar since 1974, devalued. Much more sweeping measures were announced in August and September 1980 and the Heavy and Chemical Industry Plan drastically curtailed. Even the principle of having a fifth plan was contested in 1980. But this challenging attitude did not prevail throughout the Government structure which was cheerfully continuing to generate plans, targets and taking measures to achieve them.

1.6 The Fifth Plan 1982-86

Initial drafts of the Fifth Five-Year Economic and Social Development Plan 1982-1986 were strongly critical of past policies. The final version accepted that "the Republic of Korea now stands on the threshold of fundamentally changing its economic management in order to lay the foundations for sustained development. The Republic of Korea will have to nurture its

capability to participate more actively in the world economy and to flexibly adapt to changes in the external environment."[30] The new plan portrays "the changing role of the Government vis-à-vis private economic activities. Aside from a limited number of large scale projects, investment choices will be left to the initiative of the private sector, while the Government will indicate only the general framework and direction in which such choices should be made.[31]

The general tenor of the plan was that the Government would withdraw from intervention in the marketplace, but play a larger role in social, technological and manpower development. In terms of priorities economic stabilisation took the highest place. This meant not only reducing inflation to below 10 per cent but improving the market mechanism to increase supply to match demand. The growth rate was put at between 7 and 8 per cent which was "called for to absorb the ever-increasing labour force and simultaneously to raise the income level."[32]

In accord with the economic theory that argues there is nothing a Government can do to infuence growth rates "the Republic of Korea will depart from quantitative target oriented methods as were the primary tactics of the past four plans. The present plan, in its place, relies mainly on the structural reform of economic institutions and policies, working toward, among others, import liberalisation, autonomous banking operations, and efficient industrial incentive scheme and a competitive market mechanism.[33]

In conversation, the planners alluded to the conditions created by the policy reforms of the mid 1960s, exchange rate, export incentive policies and interest rate reforms. The plan also parallels the central concern of the second plan of employment, rather than national prestige or "national development". "The growth objective of the fifth plan is mainly to reduce the rate of unemployment from 4.8 per cent to a 4.0 per cent level."[34]

Exports were to remain the leading sector, but the domestic market will be exposed to more foreign competition, including foreign direct investment. Hence the economy would be fully open by the end of the 1980s in every respect. Import substitution was to be abandoned, only industries in which the Republic of Korea had a comparative advantage were to be encouraged while energy intensive industries were to be positively discouraged.

The fifth plan is the first to include the words "and social" and promises that the social welfare scheme of the early 1970s would be revised and implemented and increased environmental investment would be made "to obtain balanced growth in all regions, sectors and social groups."[35] In particular the quality of education in all its forms is to be greatly improved.

1.7 Conclusion

It can be seen that, on paper at least, there has been a dramatic change in the conception of what a Government should do in an economy. Under this new orthodoxy much of what was done in the early 1960s and during nearly all of the 1970s was misguided. The mid-1960s are seen as the high point which created the growth momentum in the Republic of the Republic of Korea, departure from which led to the problems of the late 1970s. Indeed a KDI working paper by the highly respected Dr. Kim Kwang-suk entitled "Lessons from Korean Economic Development" pursues precisely this line, and much of the account is taken with mistakes to be avoided drawn from Korean experience in the 1970s.

Substantial sections of the business and Government community remain unconvinced by this critique. Its greatest appeal is to academic economists for whom the benefits of conforming to the precepts of neoclassical theory are self-evident. The line argued in the present work is that, in the words of W.A. Lewis, "there is no doubt that the market economy left to itself, gives the wrong answers in underdeveloped countries".[36] Moreover it argues that the new orthodoxy is historically incorrect about growth in the 1960s, and that while the overall line pursued by the Korean Government down to the beginning of 1979 while not always the best policy, it was still a good policy. The Heavy and Chemical Industry Plan was overambitious, and because of miscalculations about the scale of investment required distorted the whole economy by 1978. However it seems inconceivable that the Republic of Korea could have developed areas of successful industry such as shipbuilding on anything like the scale or speed of the early 1970s under guidance purely from market forces.

The present work agrees that much was out of balance in the economy by 1978 and that a degree of liberalisation was called for. However it argues that the problems facing the Republic of Korea in the 1980s are immense and require swift Government response rather than awaiting a response to market

signals from businessmen who have had only a limited experience of how a free market economy works.

2. The development experience

As has been shown in Chapter I, section 3, the Republic of Korea has experienced dramatic increases in GNP, exports and imports, employment and relatively rapid increases in population. At the same time, there has been a rapid change in the industrial structure and the composition of the labour force so that by 1981 the structure of the Korean economy looks much more like that of an industrial country, whereas in 1961 it had the classic structure of an LDC with over 60 per cent of the labour force in the primary sector and between 45 and 50 per cent of GNP derived from agriculture, forestry and fisheries.

Figure 2.2 illustrates the rapid growth of the three main sectors and GNP, while figure 2.3 illustrates the course of structural change.

Figure 2.2 shows that manufacturing industry has grown more rapidly than the other two sectors (mining after maintaining 10 per cent growth to 1966, fell back to an average of under 5 per cent for the rest of the period).[37] Tertiary industry, which in the Republic of Korea includes construction, has grown at about the same rate as overall GNP, while the primary sector achieved a growth rate significantly lower than GNP.[38] The poor performance of agriculture relative to the other two sectors is a reflection partly of the very unfavourable resource position of Korean farmers described in section 1.1. As result of the inability of farming to keep up with the other sectors, the course of structural change portrayed in figure 2.2 was more rapid than it might have been in an LDC with more favourable resource endowments.

The transition from LDC structure to near DC structure has been achieved in twenty years.[39] Since the goal of all Korean planning has been to develop an industrialised nation, how closely does the actual growth accord with Korean planning and the policies adopted, and how far was it the result of factors beyond the control of the Government and even unforeseen by the planners and policy makers? Moreover since as will be argued in Chapter 3, the Government has tried every trick in the book (and many that are not in the book) to achieve a high growth rate, to what degree are the measures used in the Republic of Korea transferrable to other countries?

Figure 2.2 Average annual growth rate by industry by Five-Year Plan period

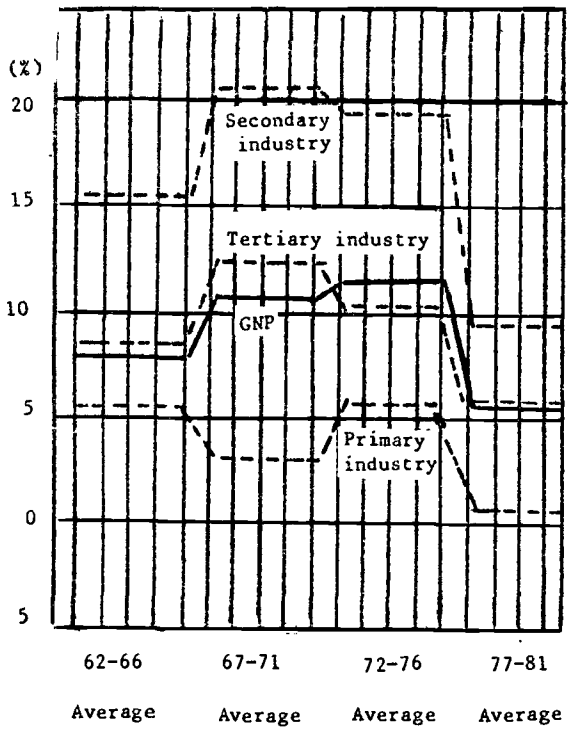
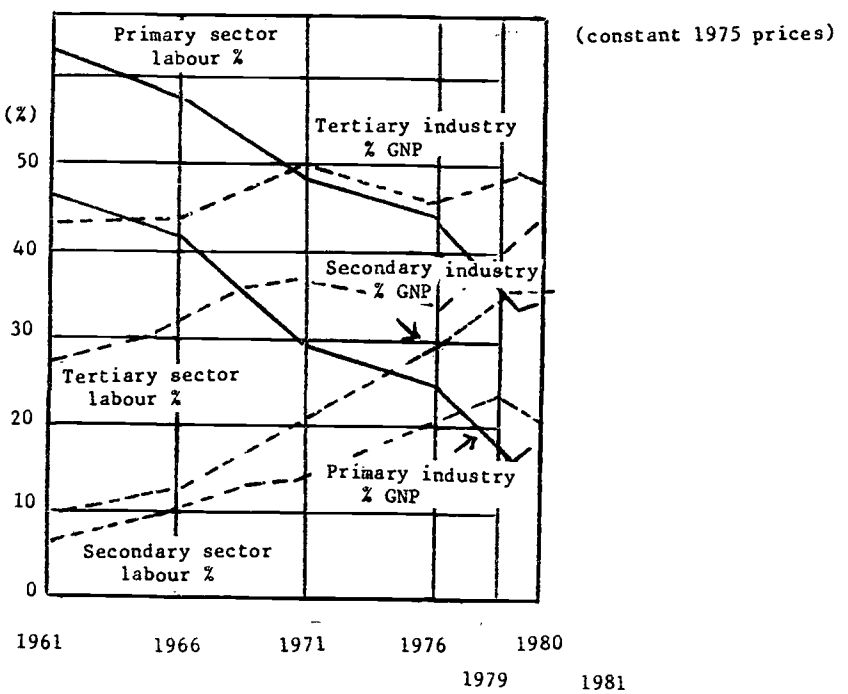


Figure 2.3 Changes in the industrial Structure and the labour force



2.1 The transition from low growth to high growth

2.1.1 Export-led growth

According to the conventional view of the Republic of Korea, the development process has been a classic case of export-led growth.[40] No one can deny that exports have been extremely important to the Republic of Korea. It is essential to delimit exactly how important exports have been. The basic argument presented here is that export growth has been an integral part of a development package pursued in the Republic of Korea, but that the quantitative role of exports in the critical transition from low growth to high growth was actually rather small.

Export-led growth has been used in a number of ways in economic literature.[41] Its primary use in the case of the Republic of Korea has been within the framework of a Rostovian leading sector whose higher than average growth rate is transmitted through backward and forward linkages to other parts of the economy, thus stimulating growth in all areas of the modern sector. As will be seen in Table 2.3 in three years in the 1970s, exports actually contributed more than 50 per cent of growth of GNP.

Table 2.2 offers export and GNP data. Column A gives the commonly used ratio of exports to GNP. This is a potentially misleading ratio, comparing like with unlike. GNP is a measure of value added, while exports are a proportion of total output. Only in the case of selected agricultural and mineral products will domestic value added approach output value.[42] Given the high import content of many Korean manufactures, the value added to total export values is much lower than in agriculture and in the pre-1970 period less than half the f.o.b. prices. Column B of table 2.2 therefore gives the Ministry of Commerce and Industries estimates of the value added ratio of manufactured exports. This is based purely on imports declared as raw materials for exports and exaggerates the value added ratio.[43] Accepting the figures in column B as accurate, column C gives the value added of exports to GNP.

Based on this data, Table 2.3 gives suggested contributions of export and domestic market to each year's GNP growth. In this the contribution of the increase in exports was calculated and the residual treated as the domestic contribution. This is a crude measure but is more likely to overstate the

Table 2.2 Exports and GNP

	A Exports GNP	B Value added[1] Ratio of exports %	Exports A x B	Increase of exports necessary to raise GNP by 1% %	Actual increase of exports %
1959		60			
1960		60			
1961	6.4	50	3.2	31.25	24.3
1962	6.0	50	3	30	32.4
1963	5.4	50	2.7	37	56.3
1964	6.7	49	3.3	30.3	34.3
1965	9.5	48	4.6	21.7	41.6
1966	11.9	45	5.4	18.5	29.8
1967	13.6	48	6.5	15.4	27.8
1968	14.7	50	7.35	13.6	41
1969	15.4	52	8.0	12.5	42.3
1970	16.0	55.3	8.8	11.4	28.4
1971	17.1	53.5	9.1	11.2	30.1
1972	21.8	60.9	13.2	7.5	46.3
1973	31.3	61.1	19.2	5.2	54.2
1974	29.5	58.2	17.2	5.8	9.0
1975	29.1	58.3	16.9	5.9	19.6
1976	34.5	63.2	21.8	4.6	39.8
1977	37.2	65	24.3	4.2	17.4
1978	36.2	67.8	24.6	4.1	14.3
1979	32.5	67	21.8	4.6	-3.2
1980		67			
1981		67			

[1]For limitations of these figures see text. Pre-1970 figures are estimates.

Source: Handbook of Korean Economy 1980, Tables 1, 50, 100.

Table 2.3 Contribution of exports and domestic markets to GNP

Year	Exports	Domestic market	Total
1961	1.0	4.6	5.6
1962	1.1	1.1	2.2
1963	1.5	7.6	9.1
1964	1.1	8.5	9.6
1965	1.9	3.9	5.8
1966	1.6	11.1	12.7
1967	1.8	4.8	6.6
1968	3.0	8.3	11.3
1969	3.3	10.5	13.8
1970	2.5	5.1	7.6
1971	2.7	6.7	9.4
1972	6.2	-0.4	5.8
1973	10.4	4.5	14.9
1974	1.6	6.4	8.0
1975	3.3	3.8	7.1
1976	8.6	6.5	15.1
1977	4.2	6.1	10.3
1978	3.6	8	11.6
1979	-0.7	7.1	6.4

Quoted from Economic Planning Board.

Source: Handbook of the Korean Economy 1980, Tables 1, 50 and 100, Tony Michell "Domestic Bliss: Lessons from Korean Economic Development 1962-1982", Euro Asia Business Review, Vol. 2, No. 2, pp. 22-27.

importance of exports than to underestimate them. By using a high measure of value-added it is intended that the indirect effect of exports would also be included.[44]

Thus it can be seen that during the 1960s, except for the poor harvests of 1962 and 1965, exports contributed between 11.5 and 27.3 per cent of growth, while the domestic sector provided between 88.5 and 72.8 per cent of growth. During the 1970s, excluding the exceptional years of 1972, 1974 and 1979, the export sector contributed between 28.7 per cent and 69.8 per cent, and the domestic sector between 30.2 and 71.3 per cent. To put it another way, assuming the total effect of exports to have been captured, in the 1960s without the development of exports, the Republic of Korea might still have grown at 6.7 per cent instead of the 8.5 per cent actually achieved. This would have made the Republic of Korea the fourteenth fastest growing developing country in the 1960s, compared with its actual position of joint fourth. Without exports in the 1970s the Republic of Korea would have grown at 5.38 per cent instead of 9.62 per cent, placing her 30th instead of third.

Therefore exports cannot explain the transition from low to high growth in the 1960s and due attention must be given to the domestic market. However during the 1970s the degree to which exports were vital to the Korean economy can hardly be exaggerated. Nevertheless the slowdown in contribution between 1976 and 1979 cannot be overlooked and although in part this was the result of an overvalued exchange rate, it must be asked whether the position assumed by exports in the early 1970s was one which could be maintained or whether it was abnormal. Since 1980 the Korean Government strategy has been predicated on the level of the early 1970s being normal. To continue at this level, the Republic of Korea's share of world trade must increase rapidly from the present 1 per cent to about 8 or 9 per cent by the end of the century. This question will be considered in more detail in Chapter 5.

2.1.2 Alternative sources of growth

If exports were not the prime mover in the transition from low to high growth, what was? In the long run only a combination of good, if not optimum, Government policies and high rates of investment can produce rapid growth.[45] In the short term if available inputs are underutilised then potential output will be curtailed.[46] The underutilisation of capital and

or labour could be the result of structural imbalances, or of Government policy.

Conversely, it could be argued that Government policy can in the short term achieve a higher rate of growth than the potential of the economy by using or encouraging the use of factors of production at more than normal intensity. Communist Governments certainly act as though this were true and claim to achieve results. Whether a Government such as that of Republic of Korea employing the concept of guided capitalism could have the same effect remains a matter of debate. It will be argued that in certain sectors, Government action had the effect of encouraging the economy to work with more than normal efficiency.[47] Whether this success was more than outweighed by Government induced inefficiencies in other sectors remains to be researched.

To have an impact on the whole of the economy, in the early 1960s the source of the gap between potential and actual output had to lie in agriculture. Indeed manufacturing had been expanding at the respectable rate of 10 per cent per annum between 1957 and 1960, whereas agriculture had grown by only 1.6 per cent. The critical measure was taken in June 1961 shortly after the military came to power. Entitled the Farm Products Prices Maintenance Law it aimed to "maintain proper prices of agricultural products to insure the stability of agricultural production and the rural economy."[48] Between 1962 and 1965 agricultural output increased at an average of 8.8 per cent. The tertiary sector grew at the same rate. During the 1950s under United States pressure, and using P.L.480 grain to flood the market, the Government held down agricultural prices below the cost of production.[49]

By reversing the agricultural policies of the 1950s and by creating a system of rural credit through merging the existing system of agricultural cooperatives with the Agricultural Bank, so that a national system reaching into every hamlet was created. The primary sector received an enormous input.[50] In the first year, 138 million dollars were lent to farmers, permitting old debts to be paid off and new investments to begin.[51] These moves were central to the beliefs of Park Chung-hee and his associates and to traditional Confucian economic thought in which agriculture is regarded as the basis of a nation's strength.[52]

As a result of these moves, despite two bad harvests in the plan period, agriculture achieved an average growth rate twice that of the second plan period. Since the profits were largely consumed rather than saved, the result was inflationary (see Figure 1.1) but set in motion supplementary growth in industries catering for the home market and hence produced derived growth throughout the economy.

Rostow likened early industrialisation to the take-off of an aircraft, with pre-conditions, the run up to take-off and then the development of self-sustaining growth.[53] From the point of view of the Republic of Korea a better analogy would be with a multi-stage rocket. The Government's success in the early 1960s was in creating a package of growth areas, some of short term duration, some sustaining the growth rate to the point where exports could become the main driving force.

Like the first stage of a rocket, agriculture could not sustain rapid growth in Korean conditions, which allowed neither expansion of area, nor labour productivity gains, until alternative employment was available elsewhere. As figure 2.2 shows, the growth rate of agriculture fell away rapidly in the mid 1960s. What then would act as a middle stage before the scale of exports became sufficient to provide a dominant driving force in the early 1970s?

The expansion of domestic demand begun by the agricultural policies of 1961 was continued to a considerable extent by rapid investment in the public sector, not only in social overhead construction, but also in manufacturing. A second feature was the concentration of development in the Seoul and Pusan region which formed sufficiently large urban markets with a higher per capita income than rural areas again encouraging domestic manufacturing. As the transport infrastructure grew rapidly in the late 1960s, these enterprises encountered not only a rapidly growing urban market but also previously unexploited rural markets.

By the early 1970s the third stage, that of export led growth was ready to take a leading role. The importance of the two preceeding stages can hardly be minimized since they created the conditions of success, and indeed ten years of high growth. There is evidence that the Government believed that the third stage would be insufficient at the beginning of the 1970s, and that

this marked the beginnings of both the Heavy and Chemical Industry Plan (1972) and the rural modernisation movement, the Saemaul Undong (1971-72).[54]

Rostow defines leading sectors as "primary growth sectors where possibilities for innovation or for the exploitation of newly profitable or hitherto unexplored resources yield a high growth-rate and set in motion expansionary forces elsewhere in the economy."[55] On this definition and the preceeding discussion, the following primary growth sectors can be identified:

Table 2.4 Primary growth or leading sectors

1956 - 1972	State enterprise
1959 - 1978	Exports
1957 - 1978	Manufacturing Sector
1961 - 1966	Agriculture
1964 - 1982	Seoul and large cities
1961 - 1969	Social Overhead Capital

In the public sector the Government not only planned and guided, but actually created growth. The public sector went far beyond providing infrastructure necessary for private enterprise. The Government did indeed use the social overhead capital sector as a leading sector and in every year from 1961 to 1969 the rate of growth was higher than in manufacturing and therefore higher than in any other sector. Despite the lack of a national physical development plan, a rapid expansion of electricity capacity, harbours and communications networks proceeded under the First and Second Plans.- A new series of railways and harbours integrated the mining regions of the

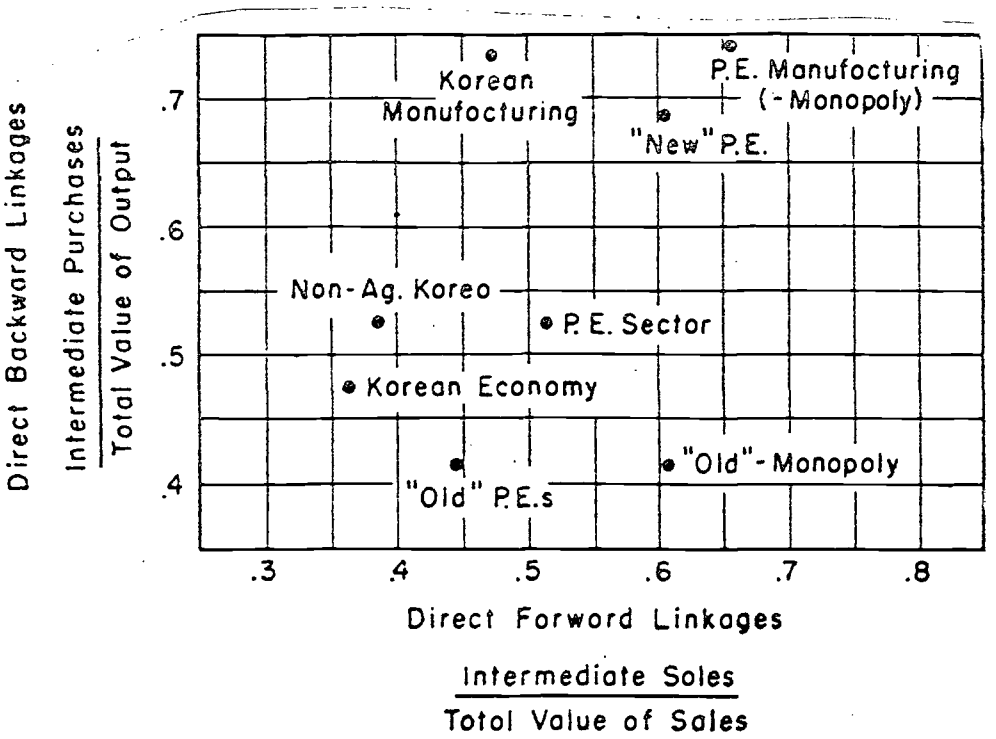
eastern seaboard into the national economy, and mining also showed a rapid growth rate until 1966.[56] Not only did the Government achieve a further stimulus of the economy, but because the infrastructure was built to a plan incorporating ambitious growth targets, the Republic of Korea was rarely seriously incommoded by any bottlenecks to manufacturing emanating from the tertiary sector.

But the Government went much further in promoting growth directly through building "model enterprises". Appendix table 5 sets out public enterprises' share in the Korean economy in 1963 and 1972 as calculated by Leroy Jones. It can be seen that public enterprises contributed just over 15 per cent of value added in manufacturing throughout the 1960s, despite the rapid growth of the whole economy, indicating rapid Government investment throughout the decade. Overall, nationalised industries' share of GDP rose from 6.98 per cent in 1963 to 9.0 per cent in 1972 and to 9.6 per cent in 1980.[57] Leroy Jones and SaKong Il have refined their analysis of nationalised enterprises to show that it had exceptionally high backward and forward linkages, compared with Korean manufacturing as a whole, and the total public enterprise sector had a higher ration of forward linkages than the economy as a whole (Table 2.4). In other words, public enterprise in the Republic of Korea fulfilled the classic role of a leading sector in which faster that average growth stimulates the rest of the economy.

The explicit aim of Park Chung-hee in encouraging public enterprise was based on the fact that "the key problems facing a free economic policy are co-ordination and supervisory guidance by the state of mammoth economic strength. Neither state nor society can be the victim of the greed of powerful interest groups. There was once a time when the "laissez-faire" policy was the only way to guarantee the maximum freedom of people's economic activities; but it was realised subsequently that such a policy was apt to widen the gap between the haves and have nots ..."[58]

Even in 1975 when privatisation had begun, 20 of the Republic of Korea's largest enterprises were in the public sector including 12 of the 16 largest.[59] During the 1960s only one divestiture took place, Korean Air Lines in 1969, but in 1972-74, 33 public enterprises were sold, nine founded and a further seven acquired. Under the Heavy and Chemical Industry Plan there was a reversal of policy, and new industries which would once have been

Figure 2.4: Direct linkages among sectors of the Korean economy, 1972



P.E. ≡ Public enterprise

"Old" P.E.s ≡ Those existing os of 5/61

"New" P.E.s ≡ Those odded since 5/61

P.E. Manufacturing (- Monopoly) ≡ Public enterprises providing manufactured goods *except* for the Office of Monopoly (which is atypically consumption oriented)

Non-Ag. Koreo ≡ Koreon economy less ogriculture, forestry and fishing

From Jones and SaKong: Government, Business and Entrepreneurship, p. 152. See Table 5 in Statistical Appendix.

public enterprises were now built by the rising number of large Korean conglomerates (known as chaebìl).

The reasons for this policy shift are not clear. In effect the State dictated the nature, scale and location of the plant and provided the bulk of the investment, so that it would have cost little more to make them public enterprises. The Ministry of Commerce and Industry was anxious to build up firms of a size which could compete with foreign multinationals, and one may also presume arguments of foreign advisers and increasingly influential Korean economists trained in the United States who were heavily biased against public sector industries.[60] The results will be considered in detail below.[61] In case of companies failing which were deemed in the national interest, such as the Shinjin Motor Company in 1975 or the Korea Heavy Machinery Company in 1980 the State was still willing to take over large enterprises, but no longer willing to found them.

State enterprise was also located in order to give a regional boost to areas with little industry, increasing regional demand. At the same time most private industry was located around Seoul and to a lesser extent Pusan and Taegu. Much development literature has an anti-urban bias, regarding the rapid development of a few cities as creating an uneven economic structure.

As a short run phenomenon the use of such growth poles may have distinct advantages. By 1970, 45 per cent of Korea's manufacturing output was produced in Seoul and a sizeable percentage of the remainder in Pusan. All modern services, a population with a per capital income 50-100 per cent higher than the national average, most modern industries and nearly all export industries made the cities leading sectors in themselves. Seoul was by this time bigger than Hongkong and Pusan approaching the size of Singapore.

It should be noted that these regional developments took place against the Government's wishes, rather than with its blessing, but the fact that during the 1960s the Government did not place any negative barriers to growth helped to stimulate the economy.

Manufacturing industry was largely dependent on the domestic market until the later 1960s, but exports were important from the start in encouraging a mood of success, a business environment in which entrepreneurs were prepared

to invest, even if until 1966, most of the investment was aimed at the domestic market. The export surge was already underway from 1959 and as Appendix table 2 suggests a number of important incentives were initiated in that year. The devaluation of the won in 1960 and above all the removal of some of the restrictions on trade with Japan allowed a rapid growth of exports.[62]

The record of the early 1960s shows a period of five years of experimentation before the Government found a set of policies which were conducive to the foundations of export-led growth, notably the exchange rate reforms of 1964 and interest rate reforms of 1965. From 1966 a set of policies relating to imports had also evolved which satisfied the requirements of the balance of payments and Korean industry. A complicated list system was devised which allowed a rebate to export industries, automatic approval for certain items and a variety of measures ranging from special approval, prohibitive tariffs and outright prohibitions.[63]

By the time of the second five year plan 1967-1971 a dual structure was established with an export sector existing in conditions close to free trade and a domestic sector hemmed in with restrictions. This structure broadly continued in existence until the 1980s when the Government began to realise that further liberalisation was required.

The transition to high growth was therefore a complex phenomenon in which exports gradually came to play a more and more important part. High growth was created before exports were quantitatively significant by utilising short term sources of growth. Such a process only became clear in retrospect and Korean planning cannot be said to have moved steadily from a preconceived goal in 1961. There were abrupt changes of policy even after the establishment of the policy package of the mid 1960s, notably in 1972-73 and 1979-80. The Korean achievement is therefore more in the nature of satisfactory adjustment to changing problems and perspectives and in finding new ways to sustain growth when the tried and trusted ways seemed to fail.

2.2 Growth of employment

The great success of the Republic of Korea has been in creating employment for the large number of people entering the labour market during the twenty year period. During the first decade of rapid growth, 1960-1970 the rate of growth of the economically active population was 2.9 per cent, higher than all but 7 developing countries. The growth rate declined in the 1970s to 2.8 per cent but 20 developing countries experienced higher rates of growth.[64] This fall appears to have been the result of more years in education rather than the demographic effects from the slowdown in the increase in population which did not begin until the early 1960s, and only began to affect the labour market in the second half of the 1970s. In the first half of the 1970s, the population aged 15 or over was growing at its maximum. However, during the 1970s the economy did not have to cope with the rates of increase which are now affecting a large number of developing countries.

Throughout this period the rate of unemployment fell. Table 2.6 gives the official figures. It should be noted that Korean statistics on economic activity contain some important anomalies. The most important is seasonal fluctuations within the non-farm economy. The figures reproduced in Table 2.6 are average figures for each year. In 1978, it will be argued later, the labour market was at its tightest and unemployment at its lowest, the economically active population ranged from 15.4 million workers in the second quarter to 12.1 million in the last quarter. Some 3.3 million people were transferred from the economically inactive category. This makes the unemployment rate (ratio of those classifying themselves as unemployed to economically active population) somewhat suspect. Had even half the transferees classed themselves as looking for employment, then the unemployment rate in the last quarter of 1978 would have been 15.7 per cent, and not 3.6 per cent.

In rural areas this phenomenon can be explained in terms of members of farm households not really thinking of themselves as employed, but merely helping the family in planting out rice, or harvesting. But for non-farm households this can hardly be true. At the end of the second quarter of 1978, 8.2 million were at work, but only 7.7 million at the end of the fourth quarter. One might have expected the number unemployed to have risen by

Table 2.6 Unemployment rates

Year	National	Urban	Rural	Seasonal Fluct. as percentage of Economically Active	
				Urban	Rural
1963	8.2	16.4	2.9	n.a.	n.a.
1964	7.7	14.4	3.5	14.7	73.8
1965	7.4	13.5	3.1	13.9	64.1
1966	7.1	12.8	3.1	9.1	69.3
1967	6.2	11.1	2.3	9.2	58.4
1968	5.1	9.0	1.9	8.2	54.7
1969	4.8	7.8	2.2	13.8	56.8
1970	4.5	7.4	1.6	2.8	54.8
1971	4.5	7.4	1.5	12.6	52.
1972	4.5	7.5	1.3	11.6	53.6
1973	4.0	6.8	1.0	11.2	53.1
1974	4.1	6.8	1.2	7.4	53.
1975	4.1	6.6	1.3	5.6	57.6
1976	3.9	6.3	1.0	6.2	55.3
1977	3.8	5.8	1.1	7.4	50.4
1978	3.2	4.7	0.9	7.0	47.5
1979	3.8	5.6	0.9	5.8	44.4
1980	5.2	7.5	1.1	2.9	49.8
1981	4.5	6.5	0.9	5.2	48.1

Source: E.P.B. Economically Active Population Survey. Various years.

Table 2.7 Employment by sector

In percentage

	Employed population	Agri., forestry & fishery			Mining and manufacturing			Social overhead capital & others		
			Agri. & forestry	Fishery		Mining & quarrying	Manufac-turing		Construction	Others
1962	-	-	-	-	-	-	-	-	-	-
1963	100.0	63.1	60.6	2.5	8.7	0.7	8.0	28.2	2.5	25.6
1964	100.0	61.9	59.7	2.2	8.8	0.7	8.2	29.3	2.3	26.9
1965	100.0	58.6	56.1	2.5	10.3	0.9	9.4	31.0	2.9	28.1
1966	100.0	57.6	55.7	2.1	10.8	0.9	9.9	31.3	2.5	28.8
1967	100.0	55.2	52.7	2.4	12.8	1.1	11.7	32.0	3.0	29.0
1968	100.0	52.4	50.0	2.4	14.0	1.2	12.8	33.6	3.5	30.1
1969	100.0	51.3	49.8	1.5	14.3	1.2	13.1	34.4	3.6	30.9
1970	100.0	50.4	49.5	0.9	14.3	1.1	13.2	35.2	2.9	32.3
1971	100.0	48.4	47.3	1.2	14.2	0.9	13.3	37.4	3.5	33.9
1972	100.0	50.6	48.4	2.2	14.2	0.5	13.7	35.2	3.7	31.5
1973	100.0	50.0	47.2	2.8	16.3	0.4	15.9	33.7	3.3	30.3
1974	100.0	48.2	45.8	2.4	17.8	0.4	17.4	34.0	3.9	30.1
1975	100.0	45.5	43.3	2.6	19.1	0.5	18.6	35.0	4.3	30.7
1976	100.0	44.6	42.4	2.2	21.8	0.5	21.3	33.5	4.2	29.3
1977	100.0	41.6	39.5	1.9	22.4	0.8	21.6	35.8	4.8	30.9
1978	100.0	38.4	36.5	1.9	23.2	0.8	22.4	38.4	6.1	32.4
1979	100.0	35.8	34.0	1.8	23.7	0.8	22.9	40.5	6.1	34.4
1980	100.0	34.0	32.3	1.6	22.6	0.9	21.7	43.4	6.1	37.3
1981	100.0	34.2	32.5	1.8	21.3	0.9	20.4	44.5	6.2	38.2

Source: EPB, Major Statistics of Korean Economy 1982, 1983.

558,000, but in fact it had risen by only 25,000. Had the former been the case, the unemployment rate amongst non-farm workers would have risen from 4.9 per cent to 11 per cent.

As might be expected the tendency was more pronounced amongst women than men. Of a decrease in the number of employed of 187,000 men, only 53,000 more classified themselves as unemployed. But with a drop of 371,000 women, the number of women classing themselves as unemployed actually dropped by 28,000.[65] Under these circumstances unemployment statistics of the Republic of Korea must be read circumspectly. Nevertheless the fall in non-farm unemployment from 16.4 per cent in 1963 to 4.7 per cent in 1978 coupled with a rise in economic participation rates from 50.8 per cent to 54.6 per cent in the same period indicates the general success of Korean development.

Table 2.7 gives employment by sector from 1963. Because of changes in the way the statistics were compiled, the preceeding years (which show a higher number of people employed) cannot be reconciled. It can be seen that primary sector employment rose by 15 per cent to 1974, but then began to decline. By 1981 employment in agriculture was lower than in 1963 by 0.6 per cent.[66] Employment in manufacturing has grown by 412 per cent to 1979, but declined by 8 per cent since that year. Employment in the service sector has grown by 189 per cent. Table 2.8 summarises the increase in employment by lagged plan period.

Table 2.8 Manufacturing employment and share of GNP increases by lagged plan period

Plan period	Average GNP growth %	Increase in manufacturing employment workers	Increase in manufacturing share of GNP Share of GNP at terminal dates in parenthesis	Export growth average ($ current)
1963-67	8.7	670.000	4.2 (14.6-18.8)	43.8
1968-72	9.5	588.000	3.4 (18.8-22.2)	38.2
1973-77	11.0	1.353.000	4.8 (22.2-27.0)	45.7
1978-81	7.1	174.000	1.4 (27.0-29.5)	20.2

Source: Calculated from EPB: Major Statistics of the Korean Economy 1983 and EPB Census of Manufacturing, various dates.

This reveals some curious features of Korean development. In the period 1963-1967 manufacturing employment provided 42.5 per cent of net employment creation. But in the years 1968-1972, the period in which manufactured exports were increasing in importance, the net increase in employment in manufacturing was absolutely less than in the preceeding years, and contributed only 23 per cent of new jobs. Between 1973 and 1977 the number of new jobs in manufacturing was three times as great and contributed 57 per cent of the increase in employment. Conversely as a result of the recession from 1979 the net increase in manufacturing was the lowest since rapid growth began, creating only 6.6 per cent of new employment. However down to 1979 manufacturing had supplied 44.6 per cent of new employment.

During the years 1968-1972 services supplied 42.5 per cent of new jobs and agriculture 29 per cent. But in the following period agriculture supplied no more than 2.4 per cent but services 38.3 per cent. In the final period services created 145 per cent of all new jobs (covering a decline in agriculture equalling 63 per cent of all new jobs).

Clearly from an employment point of view the service sector has played an extremely important role in keeping Koreans at work. This is considered in more detail in section 7. However it is important to remember that although the export and import sector stimulates sections of the service sector, much of the service sector is concerned with the domestic economy. It should also be remembered that the figures do not allow any comment on the Koreans employed abroad either in offices connected with exports, a growing area since 1972, nor in overseas construction or other overseas labour exports.

One major problem about Korean employment statistics is that while the quarterly survey by E.P.B. gives overall sectoral employment, for two or three digit employment statistics the sources are less comprehensive. Three sources may be used, employment data taken from the quinquennial population census, manufacturing employment can be derived from the manufacturing censuses conducted in 1958, 1963, 1966, 1968, 1973, 1976 and 1978 and intervening years in the 1970s covered by manufacturing surveys, or from the Ministry of Labour's monthly labour survey. The latter which offers statistics on all sectors but is based on a sample of 3,865 establishments which are supposed to form a "stratified random sample" excluding employment in establishments with

less than 10 regular employees. The figures for 1980 cover 0.4 per cent of agricultural workers, 66.8 per cent of manufacturing and mining workers, and 22.2 per cent of service workers, on the basis of the E.P.B. survey.

Table 2.9 shows employment by two digit manufacturing between 1962 and 1979.[67] In 1962, textiles and clothing (32) were already the largest, with food processing and beverages well under half the size, and fabricated metal products, machinery etc (38) in third place. By 1969, the total had tripled, but the growth of employment was fastest in miscellaneous industries (39), which included wigs, toys, and sporting and atheletic goods, labour intensive items which could often find export markets. No other sector could match the seven fold increase, but chemicals, rubber and petroleum (35) and fabricated metal products and machinery (38) had both more than quadrupled. Despite the importance of textiles and clothing, employment in this sector had grown by just under the average. By this time food procesing had fallen to third place, and was overtaken by chemicals etc. in 1974.

Between 1969 and 1978 employment in manufacturing grew by just over two and half times. The fastest growing sector was machinery (38) with a fourfold increase, basic metals (37) with a threefold increase and textiles just keeping up with the average. Miscellaneous manufactures, food processing and wood products failed to keep up. Textiles remained the most important source of employment, employing about a third of all Korean manufacturing workers in 1978, with machinery and metal products employing about 27 per cent. Only chemical products employed more than 10 per cent amongst the rest. Within the two largest 2 digit sectors, by 1978, manufacture of textiles (321) employed about nearly 80 per cent of workers, and clothing just under 20 per cent. Although leather goods and footwear were exported in sufficient numbers to attract protectionist measures they employed only about 8 per cent of classification 32. In classification machinery (38), 18 per cent worked in fabricated metal (381), slightly less in machinery (382), 40 per cent in electronics (383) and about 20 per cent in transport equipment (384).

Of the third largest classification chemicals, rubber and petroleum (35), nearly 40 per cent worked in rubber products, three-quarters of them producing rubber footwear, 20 per cent in fertiliser and basic chemicals (351), 20 per cent in other chemicals (352) and only 1 per cent in oil refining etc (353). The apparent importance of chemicals therefore depending largely on rubber footwear, a Korean speciality since the 1930s.

Table 2.9 Manufacturing Labour Force by 2-Digit Classification

	Total Over 5	31	32	33	34	35	36	37	38	39	Total including under 5	
1959	260,427	40,352	93,799	14,723	18,413	28,075	19,080	7,764	26,870	6,351	n.a.	
1960	275,254	43,196	97,521	16,625	20,490	33,281	16,593	7,027	34,505	6,216	436,000	
1961	296,585	51,833	101,966	15,107	18,663	40,300	18,054	8,199	35,662	6,801	n.a.	(450,000)
1962	304,565	39,566	109,793	14,629	19,251	42,682	21,781	10,795	40,476	5,597	n.a.	(500,000)
1963	401,981	60,558	128,470	17,448	27,387	59,510	23,651	13,130	59,776	12,011	631,000	(610,000)
1964	372,748	58,434	117,270	17,031	29,875	54,882	22,292	12,413	57,367	10,177	671,000	(637.000)
1965	460,525	71,798	169,635	18,941	30,030	63,575	31,537	15,561	67,664	12,198	800,000	(772,000)
1966	566,665	83,383	175,142	28,037	37,356	68,386	33,141	18,627	95,148	27,675	857,000	(833,000)
1967	648,811	85,211	214,492	32,534	37,809	70,720	46,504	26,213	105,135	30,193	1,043,000	(1,021,000)
1968	748,184	98,032	241,335	41,489	44,585	90,978	50,624	27,773	123,925	29,443	1,170,000	
1969	828,966	101,777	273,564	44,187	45,978	96,935	49,918	26,793	146,912	42,900	1,232,000	
1970	861,041	117,327	267,479	45,230	49,360	101,628	50,366	31,528	149,896	48,227	1,284,000	
1971	848,194	114,806	274,739	41,660	51,461	104,298	48,406	25,872	144,362	42,595	1,336,000	
1972	973,415	136,929	317,474	45,080	56,970	112,198	45,241	27,628	172,364	59,534	1,445,000	
1973	1,157,829	142,482	391,391	51,570	57,333	139,139	52,028	37,134	227,638	59,060	1,774,000	
1974	1,298,384	155,699	427,643	50,354	61,247	163,510	60,951	46,359	279,952	52,668	2,012,000	
1975	1,420,144	150,296	504,724	52,158	69,697	182,637	60,453	47,558	295,368	57,256	2,205,000	
1976	1,717,308	155,491	609,131	62,073	71,720	223,705	66,274	54,114	398,908	75,892	2,678,000	
1977	1,918,931	169,153	657,847	70,404	84,581	238,425	77,743	70,982	468,653	81,143	2,798,000	
1978	2,111,925	177,370	693,305	79,566	86,605	250,332	94,339	83,320	568,522	78,563	3,016,000	
1979	2,922,064	276,476	707,690	101,534	160,133	396,648	153,818	167,028	880,518	78,219	3,126,000*	
1980											2,972,000	
1981											2,872,000	

Source: Total Over 5 taken from Manufacturing and Mining Surveys and Census; Total Including Under 5 taken from Economic Survey of Economic Activity 1963 - present. Figures in parenthesis based on EPB revised estimates resulting from enlarging the size of the sample.

* 1979 figures based on sample apparently with a new coefficient for correction.

Table 2.9 shows a 38 per cent increase in employment in establishments of more than five employees in 1979 compared with a 3.1 per cent increase given by the survey of economic activity. The 1979 figures are taken from a sample survey, and it appears that a new coefficient was used to bring the total closer to the survey of economic activity figure. This leads to further confusion in the case of the enormous increase of such sectors as paper and publishing of 84.9 per cent, compared with the minimal increase in textile employment. This certainly reflects the problems of the textile industry but almost certainly overstates the growth of paper and publishing and basic metals. The balance of employment was certainly changing, but the 1979 figures appear to exaggerate the rate of change.

It can be seen from Table 2.9 and this summary that textiles have done no more than keep pace with the general rate of manufacturing employment, and that machinery and electronics and chemical products and basic metals have been the most rapid generators of employment. How does this growth of employment match up to the growth of manufacturing output?

2.3 The growth of manufacturing industry

Table 2.10 shows the growth of manufacturing by 2 digits. It also shows that sectors concentrating primarily on the domestic market, food and beverages, wood and wood products and paper and paper products were already well developed by the early 1950s, and experienced much slower growth in production and in employment than other sectors. Nevertheless the underlying growth of manufacturing in the 1950s, with production 100 per cent higher in 1960 than in 1954 is underlined. During the 1950s strongest growth was in paper and paper products, chemicals, rubbers and plastics and basic metal industries, with sluggish growth in textiles and wood and wood products.

During the 1960s, aggregate production increased four-fold, compared with a three fold increase in employment. This productivity increase was not even across sectors. Wood and wood products production grew slightly faster, and categories 35, 36, 37 and 38 experienced the strongest growth. Despite the rapid growth of employment in 39, output had increased by less than 70 per cent, representing a marked increase in labour intensity.[68] Despite the high rates of employment growth neither 35 nor 38 had shown any increase in productivity whereas 36 and 37 showed above average growth.

Table 2.10 Production index by 2 digits

	3	31	32	33	34	35	36	37	38	39
1954	3.6	10.4	3.1	10.7	6.8	2.6	4.2	1.2	1.8	14.8
1955	4.3	14.1	3.8	9.9	7.8	2.9	5.0	1.5	2.1	24.5
1956	5.2	17.7	4.4	10.9	8.8	3.1	6.8	2.5	2.7	21.0
1957	5.8	17.4	5.4	12.2	9.4	3.5	7.7	3.2	2.9	33.5
1958	6.5	20.1	5.6	13.1	12.3	4.1	10.1	3.5	2.9	30.5
1959	7.2	20.5	5.7	13.6	14.1	6.4	11.2	4.4	2.7	35.6
1960	7.6	19.8	5.6	13.6	17.0	7.6	11.5	5.0	2.8	28.3
1961	7.9	21.5	5.1	12.8	16.5	8.6	11.4	4.1	4.0	24.7
1962	9.2	21.4	5.9	15.2	20.0	9.8	15.0	6.3	5.2	17.4
1963	10.4	22.5	6.1	18.1	22.7	11.6	16.0	8.5	6.3	25.9
1964	11.2	20.0	7.1	14.8	25.5	13.8	22.2	6.8	6.4	19.9
1965	11.9	22.8	8.2	15.8	28.3	13.4	29.8	8.4	6.5	20.9
1966	14.9	26.7	9.6	21.6	33.4	16.8	35.7	11.9	9.1	20.2
1967	19.3	33.6	12.4	38.4	36.5	24.0	43.0	12.3	11.7	24.5
1968	26.2	41.1	17.2	57.8	53.1	35.4	48.7	20.0	14.8	30.1
1969	31.6	50.5	22.3	59.7	53.7	42.3	59.2	24.2	18.3	43.1
1970	35.3	56.4	26.6	65.6	54.7	51.4	57.9	25.3	18.9	52.3
1971	41.1	68.4	33.4	74.2	63.9	57.6	68.1	27.7	21.5	45.8
1972	47.8	77.6	45.5	83.9	70.2	62.1	67.4	33.2	23.7	59.4
1973	64.8	86.4	63.5	99.3	83.2	77.9	91.4	50.1	44.0	70.1
1974	83.7	91.7	73.8	88.2	96.6	86.8	99.9	91.5	81.5	82.2
1975	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1976	131.8	120.2	133.8	130.4	118.8	127.7	115.5	141.6	151.4	124.1
1977	158.7	149.4	148.0	149.7	140.8	157.2	146.4	172.4	191.5	151.2
1978	196.4	180.8	173.3	177.7	164.4	191.6	169.3	228.3	270.1	128.3
1979	220.1	212.8	182.1	169.2	185.9	219.7	186.6	295.4	301.7	124.1
1980	215.9	208.8	195.9	122.8	203.8	219.0	185.2	319.1	257.4	129.3
1981	238.8	217.2	228.1	130.1	214.2	223.0	185.6	420.3	299.2	108.7

1975 Weighting		
9269.1	3	Manufacturing
1518.8	31	Food and Beverages
2535.8	32	Textile, Weaving Mach.
277.8	33	Wood and Wood Prod.
451.8	34	Paper and Paper Prod.
2125.4	35	Chemicals, Rubber and Plastic
626.6	36	Non-Metallic Mineral Products
502.5	37	Basic Metal Indust.
1740.	38	Fabricated Metal
221.3	39	

Source: EPB: Korea Statistical Yearbook, Seoul, various issues.

Between 1969 and 1978 aggregate production increased more than six-fold, compared with a two-and-half-fold increase in employment. This is strong evidence for a real improvement in productivity in the 1970s. Textiles showed an eight-and-a-half-fold increase, compared with a four-and-a-half-fold increase in 35, a nine-fold increase in 37 and a fifteen-fold increase in 38. Food, timber, paper, non-metallic products and miscellaneous were well below average and showed little productivity growth.

The leading sectors of the Korean economy in the 1970s had therefore shown impressive rates in growth of output, and of productivity. Sector 38, and within that basic metals, electronics and measuring equipment (381, 383 and 385) had shown rapid growth in productivity. Transport equipment and machinery had shown much less satisfactory progress. By three digit the fastest growth of output by a long way was 323 leather goods, but excluding this, during the early 1970s, clothing, electronics and transport equipment had been the most rapid growth areas. However, since 1975 only electronics had continued to fulfill its earlier promise.

Growth rates do not tell the whole story. If gross output is taken as an approximation of the industrial structure of the Republic of Korea, textiles have retained their position of approximately 20 per cent of gross output, but lost their position of 25 per cent of value added. Machinery has exceeded textiles in terms of output since 1976 and in terms of value added since 1977. Chemicals overtook textiles in terms of output, but remain well behind in terms of value added. Sector 31 foodstuffs and beverages while well behind the other three in terms of output exceeds chemicals in terms of value added.

2.4 Exports

The period of maximum growth of employment in manufacturing 1972-1977 identified in table 2.8 is also the period during which exports exerted their maximum impact on economic growth, (Table 2.3).[69] It is important to remember that part of Korean success appears to have been the ability to absorb labour in non-manufacturing sectors during the 1960s until the manufacturing scale had reached point, about 1970, where it alone could provide more than 50 per cent of the increase in employment.

The question to be considered in this sub-section is how exports could develop to the point where more than half the output was exported in the major employment sectors of manufacturing, textiles and electronics and other machinery. The Republic of Korea might easily have joined the ranks of LDCs which attempted to promote exports and failed. If this had been the case growth in the 1960s would have been about 20 per cent lower and might have faded away in the 1970s altogether.

If planned increase of exports under the First Five-Year Economic Development Plan is compared with the actual performance, it can be seen that the total value of exports was almost twice as high as had been envisaged under the First Plan. Food and live animals performed rather better than planned but mining and other developments in raw materials underperformed. Manufactured exports however were three times their predicted value rising from 14.8 per cent of exports to 61.8 per cent in 1966.

In view of the method of compilation of the First Plan, it is not surprising that the predictions were highly inaccurate.[70] However, the ability to both produce and market items which had never been exported before was truly remarkable and requires some explanation. It is important to observe that the whole expansion took place rapidly within a narrow range of commodities. In 1955, 91 per cent of exports lay within 20 three digit categories, but by 1961, as table 2.11 shows, this percentage had fallen to 85. Between 1961 and 1971, the top 20 three digit exports remained above 78 per cent. Throughout the 1960s therefore the Republic of Korea was expanding its market in a narrow range of commodities. This may well be an inevitable stage for a country with limited export experience and a fairly unsophisticated manufacturing structure. Development in the 1970s change the commodities, but not expand the range until the end of the decade. By 1976 the top 20 commodities accounted for 80 per cent. By 1980 it had fallen to 70 per cent.[71]

Under the second plan 1966-71 the total value of exports almost exactly attained a level double the predicted figure. Again planners accurately predicted the total value of primary and mineral products, but completely underestimated the growth potential of manufactures. This was largely a failure to recognize the scope for clothing exports, which achieved a value of 304 million dollars compared with a predicted 84 million, along with underestimates of the potential of plywood, wigs and other manufactures.

The failure to predict export performance under the Second Plan which used much more sophisticated techniques was a lot more troublesome.[72] However, the continued failure to predict accurately into the Third Plan is even more serious. Again the total value of exports achieved was twice that predicted in the plan despite the downturn of the world economy after 1973. To some extent this is mitigated by much higher levels of inflation than foreseen and by the new targets introduced by the Heavy and Chemical Industry Plan of 1972. The percentage shares of each major commodity were more accurately predicted than in previous plans, the major discrepancies being the more rapid growth of clothing, ships and miscellaneous manufactures and a total failure to predict the collapse of wig exports and over-optimistic estimates for electronics.

The predictions for the Fourth Plan in terms of current dollars were slightly overshot, but in constant dollars the actual achievement was considerably below the plan figure 10,387 million instead of 14,165 million.[73] Major shortfalls occurred in machinery and transport equipment, and smaller shortfalls in textiles and footwear.

The story of the inability of the Government to identify those commodities which will form the basis of export growth, and to predict the rate of growth accurately, even with the best international advice, obviously spells a note of caution for other countries wishing to follow the Republic of Korea's path. In the Republic of Korea's case this failure was minimized by the fact that under the first three plans the error took the form of underpredicting performance. This was not the case in the Fourth Plan, though by underpredicting the rate of inflation, the current dollars projection was much closer to reality. However, in terms of the role of exports in the economy as a whole, the Fourth Plan had notably overestimated the position. Koreans would wish to emphasise the problems of the world recession, but in fact exports were slowing rapidly at the end of 1978 and first half of 1979 under the impact of an overvalued exchange rate.

A strong case can be made for supposing that, had the Republic of Korea adjusted the exchange rate flexibly in 1978, export performance would have been much better than the actual level. Especially important in the case of a country like the Republic of Korea was the need not to lose buyers to competitors like Hongkong and Singapore and even in certain commodities,

Table 2.11 Major exports by 3 digits

('000 dollars current)

	1961		1966		1971		1976		1980	
1	283 Basic Ores	4,616	631 Plywood	30,150	841 Clothing	198,261	841 Clothing	1,845.059	841 Clothing	2,854,777
2	281 Iron Ore	4,252	841 Clothes	33,002	631 Plywood	126,823	851 Footwear	498.497	653 Fabrics	1,004.043
3	031 Fish	3,948	899 Other Man.	15,925	899 Other Man.	70,586	653 Fabrics	433.292	724 Telecom	942.301
4	261 Raw Silk	3,146	261 Raw Silk	11,632	729 Valves/Tubes	48,472	729 Elec. Mach.	400.566	851 Footwear	873.840
5	001 Swine	2,464	283 Basic Ores	11,402	261 Raw Silk	39,273	724 Telecom.	302.320	729 Elec. Mach.	696.814
6	276 Non-metallic minerals	2,267	653 Synt. Fabrics	16,821	851 Footwear	37,436	631 Plywood	339.002	735 Ships/Boats	614.862
7	321 Copal	2,209	031 Fish	11,091	652 Cotton Fabric	31,004	031 Fish	268.969	031 Fish	623.235
8	292 Vegetables	2,544	054 Vegetables	8,415	031 Fish	34,097	651 Yarn	296.787	651 Yarn	623.024
9	631 Plywood	1,217	652 Cotton Fabric	7,479	651 Yarn, Thread	35,426	735 Ships/Boats	273.202	674 Iron and steel plate	555.958
10	054 Processed vegetables	1,198	671 Sheet Iron & Steel	7,046	674 Sheet Iron & Steel	19.156	674 Sheet Iron and Steel	158.224	629 Rubber	496.558
11	291 Mat. of animal	1,070	121 Tobacco	6,469	655 Twines, Ropes	17,159	891 Sound Records	156.456	678 Iron and Steel Pipes	362.321
12	652 Cotton Fabrics	771	281 Iron Ore	6,091	653 Syn. Fabrics	25,835	831 Travel Goods	142.953	631 Plywood	353.741
13	899 Other Manuf.	596	851 Footwear	5,467	121 Tobacco	14,076	629 Rubber Goods	138.555	673 Iron and Steel Shapes	347.721
14	042 Rice	507	032 Fish Prep.	4,852	292 Plants	12,654				
15	682 Copper alloys	459	042 Rice	4,634	283 Base Met. Ore	11,834	332 Petroleum Products	132.448	894 Toys, Sports	326.787
16	221 Soya Beans	436	653 Synt. Fabrics	11,091	724 Radio Receiv.	10,781	899 Misc. Manuf.	121.556	561 Fertiliser	343.639
17	284 Non-ferrous scraps	407	292 Veg. materials	3,546	661 Cement	10,587	894 Toys, Sports	121.111	672 Basic Iron and Steel	301.731
			724 Radio receivers	3,186	054 Vegetable Products	9,329				
18	671 Pig iron	390	655 Twines	3,015	276 Other Minerals	8,664	661 Cement	116.238	661 Cement	270.372
19	032 Fish Prepar.	299	698 Base Met. Art.	3,015	561 Fertilisers	7,531	864 Watches, etc.	89.520	831 Travel Goods	262.823
20	689 Bismuth	218	651 Yarn and Thread	29,947			121 Tobacco	77.076	731 Railway Veh.	260.920
							678 Iron and Steel Pipes	82.265	891 Sound Rec.	215.988
Sub-total		33,014		196,113		858,968		5,894.096		12,331.555
Percentage of total exports		85%		78.3%		80.4%		80.6%		70.4%

Source: Data supplied by UNCTAD.

Japan. Buyers were particularly unsettled by the fact that prices were highly unstable, and delivery prices were often higher than when the order was agreed.

It remains to be asked, how was this successful growth of exports achieved?' It is not possible to allocate weights, but the following factors were the most important:

a) Favourable international situation 1960-73.

b) Foreign Assistance and Investment.

c) Adequate availability of human and financial capital.

d) Favourable credit, export incentives and exchange rate regimes.

e) Positive Government leadership.

The above are listed in order of increasing ease of Government control.

2.4.1 Favourable international situation 1960-1873

For a country located close to Japan, there can have been no more favourable time to enter the world economy than the early 1960s. Japan had passed the "turning point" in the labour market, and companies were looking for off-shore bases for labour intensive manufacturing processes. In 1960 the various indirect barriers to trade with Japan were removed. The barriers were chiefly on imports, but a considerable amount of two way trade was sponsored by sogo shosha which had previously been difficult, or impossible.[74] In 1965, a full accord with permitted direct Japanese investment was signed.

The Republic of Korea's long standing links with the United States permitted access to the United States market on favourable terms. Commodity prices were stable from the point of view of the necessary imports for Korean manufactures, and in a world of fixed exchange rates, profits could be accurately gauged. The Republic of Korea encountered early barriers to textile exports to the United States under the Kennedy administration, but

compared with the 1970s there were no serious impediments to the growth of exports from developing countries.

These circumstances changed dramatically in late 1973. By this time, the Republic of Korea was well enough established to weather the international storm as well as any country. Inventor accumulation was encouraged by the Government and this allowed the Republic of Korea to take advantage of the recovery in Japan and the United States in the second half of 1975.[75] There was during this phase a notable transition in the handling of exports from foreign buyers to domestic exporters. The much less satisfactory performance in 1979-80 can largely be attributed to exchange rate policies followed by the trough of the recession. Export performance was highly creditable in 1981, but very sluggish in 1982. The general experience since 1974 suggests that the Republic of Korea was able to grow in adverse circumstances largely because it was moving into areas it had not previously exploited, notably the growth of Korean exporters, the growth of exports to Europe and exports associated with overseas construction in the Middle East. These openings were fully developed by 1980 leaving a much lower potential for further expansion. In 1981 exports grew by 20.7 per cent. About one third of this growth was in exports to Latin America and Africa, markets which the Republic of Korea had underpenetrated in the past. Slower performance in 1982 was partly the result of this limited potential of these markets being exhausted.

Consequently if the world economy remains in recession, the ability of Korean exports to grow further must be placed in doubt. It is especially important to note that the Republic of Korea's share of world trade actually decreased in 1979 and 1980. For any country embarking on export promotion in the 1980s the much less favourable prospects for the world economy, independent of the growth of tariff and non-tariff barriers can hardly be overestimated.

2.4.2 Foreign assistance and investment

The Republic of Korea received a very high level of aid in the 1950s. As pointed out above, much of this aid probably retarded development and self-reliance as much as it helped. During the first half of the 1960s, aid remained high by relative standards, although at lower levels than the 1950s. Appendix 6 shows that in the early 1960s the Republic of Korea was receiving

the highest value of aid after India and Pakistan, though it was overtaken by Vietnam in 1964. A high percentage of this aid, rising from about one third in 1966 to more than a half by 1969, was in the form of P.L. 480, mainly cotton and grain.[76]

By 1969 the Republic of Korea was at a stage where direct investment and commercial and development agency loans were of increasing value, and this has steadily increased in the 1970s. Apart from the supply of cotton which supplied the needs of a section of the textile industry, the switch from commodity aid to development and commercial loans was beneficial in forcing the Government to evaluate each offer of aid carefully on its merits. While many loans were not directly applied to the promotion of exports, they provided foreign exchange for the import of capital goods, and released Government funds for investment in public enterprises and loans to private enterprises.

Technical assistance can hardly be assessed in monetary values. Large numbers of experts were supplied through United States AID and through international agencies. Their usefulness was limited only by their use of long written reports in English which were probably only read by one or two Koreans. Direct technical assistance in construction, direction of projects and in evaluating the potential of different schemes was more important. Probably also invaluable was the day to day contact between officials of E.P.B. and United States AID which were located in identical buildings next to each other.[77]

Table 2.12 shows the rising value of foreign investment. In terms of the number of projects foreign investment peaked in 1973. Foreign investment therefore was of most importance between 1969 and 1974, and has declined in importance since. As has been seen this was partly the result of policy decisions taken at the beginning of the Fourth Plan. It will be argued below that foreign investment is important in introducing new processes into the Republic of Korea, which have then been taken up by Korean enterprises, and that the learning experience in all its phases from production to marketing is more important in an economy like the Republic of Korea's than the capital investment. In this respect the number of projects is probably more important than the actual value of the investment. The foreign investment from 1967 was highly trade related and this is reflected in the fact that bonded processing

Table 2.12 Annual foreign investment (arrival and commitment basis)

In Thousand Dollars.

	Arrival Total	Arrival		Commitments	
		Capital goods	Cash	Number of investment	Amount 1)
1962	575	-	575	1	575
1963	2 075	2 075	-	1	304
1964	3 050	3 050	-	2	333
1965	10 741	627	10 114	5	20 671
1966	4 822	88	4 734	6	1 116
1967	12 667	1 190	11 477	12	9 296
1968	14 739	4 466	10 273	20	8 461
1969	6 960	3 131	3 829	25	21 758
1970	25 272	10 385	14 887	51	14 213
1971	36 716	17 551	19 165	57	25 793
1972	61 232	20 022	41 210	108	94 930
1973	158 435	100 626	57 809	196	158 258
1974	162 629	78 069	84 560	86	74 123
1975	69 170	27 836	41 334	29	169 812
1976	105 574	37 407	68 167	35	72 160
1977	102 286	17 236	85 050	38	65 985
1978	100 457	24 612	75 845	43	140 699
1979	126 977	42 200	84 777	42	110 151
1980	96 635	27 361	69 274	36	141 040
1981	105 448	20 793	84 655	42	146 338

Source: Ministry of Finance. As quoted in EPB: Major Statistics of Korean Economy, 1982, 1983, p. 239.

grew in importance from about 2 per cent in 1962-3 to nearly 20 per cent in 1968, but has declined from 23 per cent in 1974 to 12 per cent in 1981.

Bonded processing is not confined to foreign investment, and the Japanese often preferred to subcontract, but it can be seen that the Republic of Korea moved through its bonded processing phase quite rapidly. It should also be noted that early export growth did not owe its origins to bonded processing or foreign investment. Subcontracting was probably important, though not well studied, nevertheless the early growth of exports came from Korean owned factories.[78] This is perhaps one of the most unusual features of the Korean experience.

2.4.3 Adequate availability of human and financial capital

Both the Republic of Korea's human endowment and the sources of financing for investment are considered below. The two types of capital are very different. In the 1960s the Republic of Korea was drawing largely on a pre-existing stock of human capital and it was only in the 1970s that the Government seriously began to consider how that stock could be improved. It lay beyond the power of the Government either to provide the initial starting quality of the labour force and entrepreneurs or to solve short term deficiencies after 1975. It is for this reason that the Fifth Plan takes manpower development much more seriously.

Theoretically beyond attracting foreign savings in one form or Government direct investment or another the Government could do little to increase the stock of financial capital. In practice both by deficit financing of a straightforward Keynesian type and by credit rationing, the Government did ensure that a shortage of capital in the export sector was rarely a serious impediment.[79] This will be discussed in the following section.

2.4.4 Favourable credit, export incentives and exchange rate regime

Appendix Table 2 sets out the major policy measures adopted to promote exports. In this section only those which may be classified as "field manipulation" are considered since these fall within conventional economic analysis. The general outline has been described in section 2.1., and of all

the policies, Korean exports have responded most clearly to exchange rate changes. There are strong pressures on developing countries, especially those which need to import to satisfy basic domestic needs, to maintain an overvalued exchange rate. Even for a well established exporter like the Republic of Korea in the later 1970s, it is impossible to increase exports with an exchange rate out of line with rising domestic costs.

No doubt in an ideal world model the domestic economy can be allowed to adjust to international circumstances over time and devaluation tends to increase domestic inflation so that the short run benefits may be exhausted.[80] Nevertheless in a country like the Republic of Korea where inflation is caused by other factors than changes in the exchange rate, and in which zero inflation is never envisaged in the post devaluation period, continuous adjustments to reflect the differential between world and domestic inflation rates are part of the package keeping the export sector within an open economy. Such a devaluation also acts as a stimulus to domestic industry in those areas where imports compete.[81]

It will be seen from Appendix Table 2 that many of the measures started from 1959, and combined with the 50 per cent devaluation in 1960 and more open attitude to Japan produced a 65 per cent increase in exports, the largest real increase of any year between 1959 and 1981. The two crucial measures, tariff exemptions for imports used in exports, and loans to cover working capital requirements during the period of production for export, both began in 1959.

Appendix Table 7 sets out the priorities in credit allocation. Again it will be seen that these priorities predate the period of high growth. The introduction to the First Five Year Plan makes it clear that these regulations were not properly observed and that banking was a highly corrupt business in the 1950s. By taking control of the private banks in 1961, the Government was in a position to enforce credit priorities throughout the financial system.[82]

Given the poor financial structure of most Korean companies, with low, or non-existent equity and very high debt-equity ratios, access to credit was, and is, vital for the growth of companies.[83] The great attraction of production loans to exporters were that they were given automatically on

deposit of a letter of credit, and gave 90 per cent of the letter value for 90 days. For most Korean products this was long enough to complete the production and shipping process. However it tended to create dependency on importers and discourage enterpeneurial exporting.[84]

The Government has provided the conditions under which exporters could operate with less interference from the many regulations, taxes and restrictions which hedged the domestic market, in the system worked out between 1959 and 1965. It allows both exporters and would-be exporters to enter the market and enlarge their enterprises in fields favoured by the Ministry of Commerce and Industry (MCI). The rules have been reasonably clear and consistent and very favourable to exporters as opposed to domestic production. Professor Anne Krueger estimates that the measures constituted a differential of about 9 per cent between production for domestic and export markets. This does not take into account the fact that production might have been impossible for purely domestic purposes because credit would have been unavailable. On the other hand 9 per cent is only an incentive if profits in exporting and the domestic market are equal. There is every reason to suppose that this was not the case and that the profits were made in domestic sales.[85].

2.4.5 Positive government leadership

In addition to creating an institutional environment in which business could export successfully, the Government directly intervened in the system to promote exports. The role of MCI in masterminding the expansion of exports will be discussed at length in Chapter III. MCI rapidly created a system which allowed potential growth areas to be exploited rapidly. This included creating special funds for favoured sectors for investment, as opposed to working capital, in both domestic and foreign currencies.

An extensive range of quasi-governmental agencies were created which allowed a very close and symbiotic relationship to grow up between the Government and business. Examples will be given in the following Chapter, but one, KOTRA must be mentioned here. In 1964, the Government created this Korean Overseas Trade Association, which was to be a purely Government organisation, which would open up overseas offices, liaise with the network of

commercial attachés around the world and feedback to MCI and enterprises information on market opportunities, prices, marketing techniques and foreign companies' credit ratings, thus accelerating the learning process.

From 1961 onwards not only did the Government hold monthly export promotion meetings in which the President, officials and businessmen sat down to discuss necessary measures, but pioneered economic and trade diplomacy in which a mixture of Government officials and businessmen formed a delegation to visit prospective markets abroad. Trade diplomacy has been an important part of Korean policy ever since and paid handsome dividends during the oil crisis. It has become a major strategy since 1980 in advancing Korean trade into the Third World.

2.5 The scale of exports in manufacturing

The most difficult calculations are those related to the size of the export sector within the total manufacturing structure of the Republic of Korea. Calculations have been offered earlier as to the role of exports in promoting economic economic growth (see Table 2.3). But what percentage of total manufacturing output is expected; what percentage of the manufacturing labour force is employed in exports; are the export industries atypical?

The one question which can be directly answered is the percentage of Korean output which is exported, since this can be calculated from input-output tables. Starting from 9.7 per cent in 1966, it reached 29.5 per cent in 1973, but had fallen to 23.1 per cent in 1978. A better indicator is perhaps the ratio of exports to final demand (see Table 2.13). This shows the exceptionally rapid growth between 1963 and 1966 when exports rose from 8 per cent of final demand to 22 per cent, but then a virtual stagnation between 1966 and 1970, illustrating once again the scale of expansion of the domestic economy, followed by another period of rapid growth to the peak of 40.1 per cent in 1973. Then followed was a bad year for exports in 1975 and the share of final demand dropped to 22.7 per cent. There was then a rise to 36.4 per cent 1978. Were figures available for all years, it might be that in 1976 and 1977 the share of final demand was higher than in 1978, and that it dropped sharply in 1979.

These figures largely support the conclusions drawn earlier. During much of the Republic of Korea's development, manufactured exports have contributed

Table 2.13 Estimates of the contribution of exports to final demand and employment

	1960	1963	1966	1970	1973	1975	1978
1. Manufactured exports as a % of manufacturing output	-	-	9.7%	-	19.5%	-	23.1%
2. Manufactured exports as a % of final demand	5%	8%	22%	26%	40.1%	22.7%	36.4%
3. Export manufactures % of total manufacturing employment	5%	6.4%	16.5%	22.5%	(34.5%)	(19.5%)	(31.3%)
4. Share of total employment		0.5	1.6	3.0	5.5	3.6	7.0

Source: Figures from 1960, 1963, 1966 and 1970, columns 2, 3, 4, taken from D.C. Cole and L. Westphal: "The contribution of exports to employment in Korea". Data for 1973, 1975 and 1978 calculated from: BOK, Input Output Tables for the respective years.

about 22-25 per cent of manufactured final demand, with abnormal peaks in the early 1970s and a probably trend of just over a third in the later 1970s.

Calculating the contribution to employment is much more complex. Table 2.13 also reports the calculations of Cole and Westphal for 1960 to 1970 where it can be seen that the share of employment in manufacturing generated by exports was somewhat lower than the share in final demand.[86] No independent calculations can be offered for the 1970s because of the complexity of the assumptions used by Cole and Westphal.[87] However it may be assumed that the general trend bore much the same proportion to the ratio of exports to final demand as in 1970.

On this basis employment generated by exports reached 34.5 per cent of manufacturing employment in 1973, fell back to 19.5 per cent in 1975 and stood at 31.3 per cent in 1978.[88] The share of total employment in the Republic of the Republic of Korea generated by manufactured exports constitutes the final indicator. Because of the growth of manufacturing employment in the total economy, even though the share of exports in final demand was lower in 1978 than in 1973, the share of total employment is higher. Hence as the agricultural sector continues to contract in the 1980s, even if the share of exports remains static or declines slightly, its contribution to total employment is likely to increase.

The final question is whether export oriented industries differ fundamentally from the structure of Korean manufacturing as a whole. A *prima facie* answer must be yes. The Republic of Korea exports along the lines of its comparative advantage, while the Government created institutional and *ad hoc* conditions which allowed exporting industries to develop in a much more open economy than domestic industry. Hence Korean export industries should be more labour intensive and more efficient than Korean industry as a whole. It might well also be more generally import dependent than Korean industry. Appendix Table 8 shows the structure of Korean industry for 1978 from the point of view of labour intensity and import dependence.

2.6 Export markets and import dependence

2.6.1 Exports

If the products exported and the factors influencing the early growth of exports has been considered, it is now important to look at the principal Korean markets which underlines some of the points previously made.

Table 2.14 shows the considerable changes in export markets. Between 1960 and 1964 Japan wa the major export market, taking over 40 per cent of all exports in 1961 and 1962. However by 1965, the United States had overtaken Japan, taking an increasing share of Korean exports until 1968 when exports to the United States exceeded 50 per cent. Between 1968 and 1972, exports to the United States remained above 45 per cent of total exports, but then dropped abruptly in 1973 and has remained at around 30 per cent until 1979 when it fell further to 29.1 per cent in 1979 and 26.3 per cent in 1980. By 1980 the share was lower than at any time since 1963. Exports to Japan fell as low as 21 per cent in 1968 and 1969, but then advanced as high as 38 per cent in 1973 before declining to around 21 per cent towards the end of the 1970s, and falling to 17.4 per cent in 1980, and 16.5 per cent in 1981, lower than at any time since 1960.

Thus these two major markets consumed 60 per cent of the Republic of Korea's exports from 1960 to 1965, and around 70 per cent until 1973, but a decreasing proportion during the later 1970s, falling as low as 43.7 per cent in 1980 and 43.2 per cent in 1981. By 1979, 78 per cent of the Republic of Korea's exports went to developed countries and 22 per cent to LDCs and oil exporting countries. Exports to developing countries accelerated in the next two years, so that in 1981, 36.7 per cent of exports went to Third-World countries, and only 63.3 per cent to developed countries. Included in Third-World countries is 4.4 per cent listed as "not classifiable" which may be presumed to be communist countries, primarily the People's Republic of China.[89]

This development of Korean exports is fairly simply explained. Between 1960 and 1965 non-manufactured exports were important, finding their major markets in Japan and through Hongkong. As manufactured exports grew faster than non-manufactured, the United States market became more important. As a result even in 1981, the share of the Japanese market in manufactured exports

Table 2.14 Principal Export Markets

In percentage

	合 計 Total	美 國 U.S.A.	日 本 Japan	香 港 Hong Kong	自由中國 Taiwan	인도네시아 Indonesia	英 國 U.K.	西 獨 Germany	其 他 Others
1962	100.0	21.9	42.9	8.6	2.6	-	2.9	0.4	20.7
1963	100.0	20.0	28.6	10.5	0.8	-	1.8	1.5	28.8
1964	100.0	29.9	32.1	9.7	1.6	0.1	3.5	0.9	20.2
1965	100.0	35.2	25.5	6.2	1.2	0.1	2.3	2.0	27.4
1966	100.0	38.3	25.9	3.8	0.9	0.3	2.0	2.0	26.2
1967	100.0	42.9	26.5	4.0	1.0	0.4	2.5	1.7	20.4
1968	100.0	51.7	21.9	3.4	1.3	0.2	1.5	2.1	17.8
1969	100.0	50.2	18.2	3.9	2.2	0.3	1.7	2.6	20.9
1970	100.0	47.3	28.1	3.3	0.9	0.3	1.6	3.3	15.1
1971	100.0	49.8	24.5	3.9	1.1	0.8	1.3	2.9	15.8
1972	100.0	47.1	25.2	4.9	1.0	1.3	1.0	3.2	15.9
1973	100.0	29.9	36.3	3.4	1.2	0.9	2.2	3.4	22.8
1974	100.0	33.5	30.9	3.4	1.2	1.2	2.4	5.4	22.0
1975	100.0	30.2	25.4	3.6	1.3	1.0	3.2	6.1	29.1
1976	100.0	32.3	23.4	4.2	1.1	0.6	3.3	5.2	29.9
1977	100.0	31.0	21.4	3.4	1.0	0.7	3.0	4.8	34.6
1978	100.0	31.9	20.7	3.0	1.1	0.8	3.1	5.2	34.1
1979	100.0	29.1	22.3	3.5	1.1	1.3	3.6	5.6	33.5
1980	100.0	26.3	17.4	4.7	1.2	2.1	3.3	5.0	40.0
1981	100.0	26.7	16.5	5.4	1.2	1.7	3.3	3.8	41.3

Source: EPB: Major Statistics of the Korean Economy, 1982, 1983, p.231.

is exaggerated in aggregate statistics, since 9 per cent of Korean exports are still foodstuffs and mineral products, going primarily to Japan.

The process by which the United States developed as a major market for Korean manufactures before either joint ventures or United States buying offices in the Republic of Korea were established still requires further research. It appears that the mediation of Japanese trading companies was important, taking manufactures as barter for imported machinery. The role of the United States establishments in the Republic of Korea in assisting Koreans to export at this stage also requires examination.

The huge amount of direct investment and subcontracting by Japanese firms in the late 1960s resulted in the rapid increase of exports to Japan in the early 1970s, but this phase in the Republic of Korea's development was cut short by the oil crisis. Thereafter the Government began to take direct steps to boost exports to other markets, both through the creation of G.T.C.s and direct trade diplomacy. The major success was penetration of the European market, largely with products already developed for the United States or Japan. The European market share of exports rose from 10 per cent in 1972, to 17.5 per cent in 1976, and to 18.8 per cent in 1979 despite the rise of trade barriers on Korean goods. Europe's share of the Republic of Korea's exports fell in 1981 to 15.9 per cent. The other success story was the penetration of the oil exporting countries, notably Saudi Arabia.

The type of export to the OPEC countries was quite different to the previous type of export, since these were countries with a low population density and preference for quality over price in consumer goods. However, this was closely related to the growth of overseas construction companies in the Republic of Korea which were able to use Korean construction materials and equipment. This was largely a fortuitous accident, but one of great importance in Korean development.

No one in the early 1970s had foreseen the oil crisis or the growth of overseas construction. However Government policy had been directed towards developing precisely the sort of industry which would serve overseas construction. Had the new market not developed, one can imagine that the industries sponsored under the heavy and chemical industry plan would not have prospered as they did.

The presence of a large number of Koreans in such countries allowed the development of further exports both to Koreans and to natives. Thus Saudi Arabia has for instance developed as an important market for the limited number of cars exported.[90]

Penetration of other markets notably African and Latin American markets has been slow, although patient trade diplomacy and salesmanship appears to be paying off in the last two years of the 1970s, and led to a rapid increase in 1980 and 1981.

2.6.2 Imports

In every year of the Republic of Korea's existence as an independent state, it has imported a larger value of commodities than it has exported. Certain countries have therefore been great beneficiaries from Korean development. Table 2.15 sets out sources of Korean imports over time. Here there is an inverse relationship compared with exports as far as Japan and the United States are concerned. In the early 1960s imports from the United States far exceeded those of any other country, reflecting the close AID relationship developed during the 1950s. In 1965, at the very time exports to the United States were overtaking those to Japan, imports from Japan expanded reaching 41 per cent in 1966 and still totalling 40 per cent in 1978, though there has been a dramatic drop in the last two years.

By 1981 Japanese imports comprised only 24.2 per cent. However if figures for commercial imports only were used in the 1960s, then Japan would figure much higher in the Republic of Korea's trade, vis à vis the United States. The combined total of imports from the two countries ranged between 73 and 65 throughout the period of development to 1978, despite the leap in oil prices that lifted oil imports share of the Republic of Korea's import bill to around 25 per cent after 1974.

Whereas the United States economy had been the main beneficiary during the 1950s and early 1960s, Japan has been the major beneficiary between 1966 and 1979. By the later 1970s Japan's trade surplus with the Republic of Korea was running at over $2 thousand million, about 20 per cent of Japan's total trade surplus. At the same time the United States experienced a trade deficit only 1972, and between 1976-1978, though of a much smaller scale. Most other

Table 2.15 Principal sources of Korean imports

In percentage

	合 計 Total	美 國 U.S.A.	日 本 Japan	香 港 Hong Kong	自由中國 Taiwan	인도네시아 Indonesia	英 國 U.K.	西 獨 Germany	其 他 Others
1962	100.0	52.2	25.9	0.1	1.7	0.0	1.5	4.6	14.0
1963	100.0	50.7	28.4	1.1	2.7	0.2	0.9	4.1	11.9
1964	100.0	50.0	27.2	1.5	1.3	-	0.8	5.9	13.3
1965	100.0	39.3	37.8	1.7	2.2	0.0	0.3	3.5	15.2
1966	100.0	35.4	41.0	1.1	1.6	0.2	0.3	2.8	17.6
1967	100.0	30.6	44.5	1.2	2.7	0.1	0.5	3.1	17.2
1968	100.0	30.6	42.6	0.9	1.1	0.4	1.0	5.0	18.4
1969	100.0	29.1	41.3	1.1	1.3	0.8	1.8	4.3	20.3
1970	100.0	29.5	40.8	1.0	1.7	1.0	1.7	3.4	21.0
1971	100.0	27.5	39.8	0.8	1.7	1.7	1.9	3.1	23.4
1972	100.0	25.7	40.4	1.4	1.9	2.5	2.9	2.7	21.9
1973	100.0	28.3	40.7	0.7	1.3	3.6	1.6	3.1	20.5
1974	100.0	24.8	38.2	0.4	1.6	2.4	1.3	2.0	29.1
1975	100.0	25.9	33.5	0.3	2.3	2.0	1.7	2.6	31.8
1976	100.0	22.4	35.3	0.4	0.9	2.7	2.0	2.7	33.6
1977	100.0	22.6	36.3	0.3	1.0	3.3	1.4	3.2	31.8
1978	100.0	20.3	40.0	0.3	1.1	2.7	1.4	3.3	30.9
1979	100.0	22.6	32.7	0.4	1.1	2.9	2.5	4.1	33.6
1980	100.0	21.9	26.3	0.4	1.4	2.2	1.4	2.9	43.5
1981	100.0	23.1	24.2	0.8	1.4	1.5	1.5	2.6	45.0

Source: EPB: Major Statistics of the Korean Economy, 1982, 1983, p. 232.

countries have enjoyed considerable surpluses in their Korean trade until 1972, but have tended to experience deficits since 1972, this is largely off-set by the healthy French surplus. This surplus appears to be partly the result of the barriers to trade implicit in the French market, including the direct exclusion of 12 major commodities by 1981 (more than any other country except Australia), but also of much more aggressive marketing than either the British or West Germans.[91]

Thus throughout most of the period under discussion all the developed countries have reaped considerable benefits from trade with the Republic of Korea. The calculations of job gains and job losses such as those contained in Employment, Trade and North-South Co-operation assume that there is a quid pro quo increase of exports and imports to NICs. However historically imports from DCs have far exceeded exports to DCs and hence the positive gain has been quite large to most DC economies.[92]

2.6.3 Structure of imports

The Korean War totally distorted the structure of the Republic of Korea's trade. The ratio of exports to imports deteriorated from 76 per cent in 1949 to 9 per cent in 1954. The ratio was only 10.8 per cent in 1960. Under such circumstances it is hardly surprising that the dominant thought of the Government in the 1950s was to constrain imports and promote industries on an import substitution basis. It also explains why the framers of the First Five-Year Plan and indeed all subsequent plans were as concerned with import substitution as with the promotion of exports. The two policies seemed intimately connected with a mutual aim, a balanced current account.

Studies of import substitution have tended to either concentrate on the policy of the 1950s or to try to analyse the contribution to growth of import substituting policies. Indeed the conventional view of Korean development is that the Republic of Korea changed from import substitution to export promotion in the early 1960s. In its sophisticated version a stages of growth thesis is enunciated in which import substitution precedes export-led growth.

The adoption of a unified exchange rate and reduction of import controls in the wake of the 1960 devaluation was a bold attempt to create free trade.

Unfortunately the high rate of inflation eliminated the advantage of the devaluation, and import controls came back. In the reforms of 1964-5, import controls remained, except for export related and strategic items. The limitations on imports are reviewed every year in the Annual Export and Import Notice of the Ministry of Commerce and Industry (MCI). Table 2.16 summarizes the situation in recent years.

By 1967 the ratio of commodity exports to commodity imports had improved to 36 per cent, a remarkable achievement. As a result a new import system advised by Professor Ronald McKinnon with a shift from a positive list of items which might be imported, to a negative list in which most items would be subject to automatic approval. Table 2.16 shows that although the number of items prohibited decreased, the items subject to restrictions increased between 1968 and 1970.

Moreover, for countries with which the Republic of Korea had an unfavourable balance of trade, such as Japan, even items on automatic approval required the consent of MCI. Finally the low rates of tariff suggested by Professor McKinnon were not adopted.[93]

Although minor measures of liberalisation were initiated, it was not until early 1973 that a major tariff reform was initiated with a general reduction of tariff rates from 38.8 per cent to 31.3 per cent with the special tariff used to tax large differences between the price of local and international goods abolished. By 1972, the ratio of exports to imports had grown to 74.4 per cent, and this sort of liberalisation could be accepted.

In 1978 after the current account surplus of 1977, a year in which, despite the rise in oil prices since 1973, exports equalled 92 per cent of imports. New import liberalisation measures were adopted which pushed the ratio down to 74 per cent in 1979 but back to 87 per cent in 1981. The Korean record on import liberalisation in the later 1970s has therefore been exceptional, with liberalisation rather than a trade balance being pursued, even at a time when protective measures were being adopted in developed countries.

Table 2.16 Number of items in each import regime
1968-1975

	Prohibited	Restricted	Automatic Approval	Total
Second half 1967	118	402	792	1,312
Second half 1968	71	479	756	1,312
Second half 1969	74	530	708	1,312
Second half 1970	73	524	715	1,312
December 31, 1971	73	570	669	1,312
December 31, 1972	73	571	668	1,312
December 31, 1973	73	556	683	1,312
December 31, 1974	71	563	678	1,312
December 31, 1975	66	602	644	1,312

Sources: Frank, Kim, and Westphal, p.59 for 1967 to 1970; IMF, Annual Report on Exchange Restrictions, various issues from 1971 to 1975. Quoted in A. Krueger, The Foreign Sector and Aid, p. 129.

Note: After 1967, the enumeration of items within lists was done on an SITC basis. The total 1,312 represents the total number of SITC categories. These data were issued by the Ministry of Commerce and Industry. There are, of course, sub-categories within each major group. Thus, the 17,128 sub-items on the AA list after July 25, 1967, were from 792 items. See Frank, Kim and Westphal, pp. 58-59.

Many foreign observers take an opposing view, suggesting that the Republic of Korea has tended to liberalise raw materials and items where the domestic market could compete or where the products are needed, but not where imports would be cheaper than domestic manufactures. The major category where Korean imports have been low have been consumer goods. In comparison with other developing countries, the Republic of Korea has indeed restricted imported consumer items, only India and Turkey having a lower percentage of consumer goods in their total import bill.

From the point of view of Korean development strategy this seems not unreasonable. It is not merely a case of wishing to conserve foreign exchange for investment, though this is certainly important, nor to protect domestic manufacturers, though this too has been a major factor, but to prevent the conspicuous displays of wealth by the rich which might have created jealousies between rich and poor. Under the Fifth Five-Year Plan it is intended to increase the liberalisation rate. This reflects a change in the basic social policy as well as a response to neoclassical trade theory.

2.6.4 Imports and the balance of payments

From the foregoing it will be clear that like most developing countries, the balance of payments problem was uppermost in the minds of Government officials until 1977. Table 2.17 sets out the balance of payments since 1961. The enormous importance of foreign aid prior to 1967 in balancing payments is clear. Likewise the importance of foreign loans which have largely replaced foreign aid since 1966.

While imports have been constrained, and exports steadily increased, the gap since 1967 has been largely filled by long or short term loans and a surplus in invisible receipts which grew rapidly after 1975. A major priority has been to ensure that sufficient long term loans have been available. The actual repayment of long term loans was never a problem as long as exports were increasing rapidly, so that loans with more than three years maturity rapidly diminished in importance by the time repayment of the principal began.

In this context the grace period on any loan was a major consideration. The longer the grace period, the better for the Republic of Korea. Appendix Table 9 summarises the situation of foreign debt. It can be seen that in

recent years, short-term finance and refinance has been extremely important. In part this was by choice, since in 1978 and early 1979 the Republic of Korea believed more favourable long term loans would be available in a few months time. The dramatic rise in interest rates from 1979 caught the Koreans out in this respect, so that as in all other debtor countries the debt ratio (debt repayments to current account receipts) rose steeply after falling steadily since 1972.

Compared with many debtor countries the Republic of Korea seemed an excellent risk to most foreign banks. In 1978 it could get commercial loans at terms almost as favourable as from international agencies or exim banks. Obviously if Korean stability ever seemed threatened, a foreign exchange crisis could develop at any time, given the level of foreign exchange reserves and short term debts. Foreign confidence is a highly volatile element. Between October 1979 and October 1980 foreign confidence was shaken in the aftermath of the death of President Park and foreign exchange reserves fell. The crisis passed rapidly and even at its height a number of foreign banks were prepared to lend more money.

Because foreign loans have always been available, it was possible to pursue the policy described in section 1 of not giving great encouragement to direct investment under the Fourth Plan. A high proportion of this direct foreign investment was not in the form of foreign exchange, but in machinery and plant, some of it even second-hand.[94]

The point at which the decision to try to phase out foreign investment was made is unclear, but appears to have been when much of the promised investment failed to materialise in 1974. The policy was reversed in 1980, but at the time of writing foreign companies appear to remain sceptical.[95]

Table 2.17 Balance of payments

In million dollars

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981 P)
Current balance	-26.1	9.1	-103.4	-191.9	-440.3	-548.6	-622.5	-847.5	-371.2	-308.8	-2 022.7	-1 886.9	-313.6	12.3	-1 085.2	-4 151.1	-5 320.7	-4 478.0
Trade balance	-244.9	-240.3	-429.5	-574.2	-835.7	-991.7	-922.0	-1 045.9	-573.9	-566.0	-1 936.8	-1 671.4	-590.5	-476.6	-1 780.8	-4 395.5	-4 384.1	-2 985.1
Exports	120.0	175.6	250.4	334.7	486.3	658.3	882.2	1 132.3	1 676.5	3 271.3	4 515.1	5 003.0	7 814.6	10 046.5	12 710.6	14 704.5	17 214.0	20 886.0
Imports	364.9	415.9	679.9	908.9	1 322.0	1 650.0	1 804.2	2 178.2	2 250.4	3 837.3	6 451.9	6 674.4	8 405.1	10 523.1	14 491.4	19 100.0	21 598.1	23 871.1
Invisible trade balance	23.9	46.1	106.5	157.1	169.3	197.3	119.3	27.8	32.9	67.1	-308.3	-442.2	-71.8	266.0	224.0	-194.6	-1 385.9	-2 007.4
Credit	91.0	114.2	204.3	308.2	394.0	492.4	496.8	483.7	550.3	849.4	837.8	880.6	1 642.7	3 027.0	4 450.1	4 826.2	5 363.3	6 618.6
Debit	67.1	68.1	97.8	151.1	224.7	295.1	377.5	455.9	517.4	782.3	1 146.1	1 322.8	1 714.5	2 761.0	4 226.1	5 020.8	6 749.2	8 625.8
Unrequited transfers(Net)	194.9	203.3	219.6	225.2	226.1	245.8	180.2	170.6	169.8	190.1	222.4	226.7	348.7	222.9	471.6	439.0	449.3	514.5
Long-term capital	29.0	37.3	211.8	201.2	453.8	563.5	501.0	512.0	521.0	666.3	946.4	1 178.3	1 371.2	1 312.7	2 166.3	2 662.9	1 856.5	2 753.2
Loans & investment	22.3	46.5	195.9	210.0	313.7	568.2	535.9	556.3	524.0	591.1	732.6	1 059.8	1 302.2	1 495.5	2 052.8	1 627.3	1 895.5	1 654.7
Basic balance	2.9	46.4	108.4	9.3	-6.5	44.9	-121.5	-335.5	149.8	357.5	-1 076.3	-708.6	1 057.6	1 325.0	1 081.1	-1 488.2	-3 464.2	-1 724.6
Short-term capital	-4.4	-23.1	6.4	85.9	13.2	56.5	122.4	134.6	-16.3	84.0	-45.4	679.5	356.5	21.4	-1 171.0	843.6	1 944.5	-82.3
Errors & omissions	-1.2	-7.1	4.4	23.0	-20.2	-7.7	-5.1	13.1	30.1	18.8	27.9	-121.5	-240.5	-31.7	-312.0	-328.7	-369.9	-530.4
Overall balance	-2.7	16.2	119.2	118.2	-13.5	93.7	-4.2	-187.8	163.6	460.3	-1 093.8	-150.6	1 173.6	1 314.7	-401.9	-973.3	-1 889.6	-2 343.5
Foreign exchange holdings	136.4	146.3	245.2	356.6	409.7	552.9	609.7	568.1	739.7	1 094.4	1 055.7	1 550.2	2 960.6	4 306.4	4 937.1	5 708.1	6 571.4	6 891.0

Source: EPB, Major Statistics of the Korean Economy 1982, 1983, pp. 209, 210.

2.7 Savings, investment and inflation

The preceeding sections may appear to represent the Korean experience as "too good to be true". The Republic of Korea succeeded in promoting exports, and in retrospect the type of description given above makes the process appear very simple. The Republic of Korea entered the world economy at a favourable point in history, was assisted by two powerful nations and by a Government which was determined to succeed, despite negligible resource endowments. Why did the Republic of Korea not encounter the problems which have blocked the path of most developing countries? In particular how could a country with a domestic savings ratio of only 3.3 per cent achieve an average growth rate of 9.2 per cent between 1961 and 1979.

Neoclassical growth models assume that investment (and growth) are savings constrained. The financing of the First Five-Year Plan had been predicated on this hypothesis. Neo-Keynesian models argue rather that savings adjust to investment demand. There are good grounds for preferring the latter description in the Republic of Korea's case. However there are equally good grounds for believing that this was only true because the Government was willing to increase the money supply to close the domestic gap between savings and investment demand.

Norton and Rhee for instance argue that output is determined by expectations and by availability of domestic credit.[96] Output growth therefore determines investment, and investment needs determine savings.[97] Therefore the level of savings was not a constraint to Korean growth.[98]

Implicit in this argument are three assumptions:

- growth could have been no higher;
- unlimited credit was available;
- credit was not directly related to savings.

The proponents of this view never intended proposition one should be considered by itself, and the second assumption is demonstrably false. Credit was rigorously controlled and rationed by the Government as described above. Under the third proposition if credit exceeded domestic and foreign savings, then the money supply would be enlarged and inflation might be expected.

It will be argued that not only was inflation present throughout the period of rapid growth, as shown in figure 1.1, but this was not merely a by-product of Korean development but integral to it. Inflation was minimised because the enlarged money supply was largely directed towards increasing productive capacity but inflation served as a general tax on consumption. The revenue from this tax was then directed into development by the Government. Secondly inflation favoured capital accumulation by industry since real interest rates were frequently negative.

Table 2.18 summarises the data since 1961. It shows that the Republic of Korea was fortunate in receiving such high levels of aid at the outset of rapid growth since domestic savings were so low, but that it rapidly fell in importance. Between 1968 and 1972 foreign savings increased, partly in the form of direct investment and partly as foreign loans.

While the phasing out of foreign investment lay within the reach of the Republic of Korea in the mid 1970s, the possibility of phasing out foreign savings altogether was clearly out of the question, once the current account surplus of 1977 was past. The foreign savings were, as has been shown, essential to the balance of payments. Were they also essential to investment? Chenery and Strout and Chenery and Eckstein have suggested that an inflow of foreign capital could reduce domestic savings when the trade gap was binding, as it has been in the Republic of Korea except in 1977.[99] Kim and Park found some evidence for this in the early 1970s.[100] Since the Republic of Korea has not been in the position to experiment in this direction and few other LDCs are likely to either, the question would be academic were it not for an allied question of whether foreign savings also allowed private consumption at a higher rate, and a lower rate of inflation.

One further riddle is the Government policy after the interest rate reform of 1965. The demand for time and savings deposits combined with inflows of foreign capital led to a marked increase in broad money, by 64 per cent, 80 per cent and 62 per cent in three consecutive years, compared with an average rate of 30 per cent in the five years before. The Government therefore adopted a restrictive stance on monetary and credit policy. The required reserve ratio on time and savings deposits was raised fron 10 per cent to 20 per cent in February 1966, and to 25 per cent in November 1967 and did not return to the 1965 level until 1971. Demand deposit ratios reached the all time peak of 35 per cent in November 1967. The monetary policy was

Table 2.18 Savings and investment

at current market prices

	總投資 Gross investment % GNP	民間 Private	政府 Gov't	國民貯蓄 National savings	民間 Private	政府 Government	海外貯蓄 Foreign savings	純移轉 Net transfers from the rest of the world	純借入 Net borrowing from the rest of the world	統計上不一致 Statistical discrepancy
	Percentage									
1962	11.6	6.7	4.9	25.5	37.5	-12.0	83.4	67.5	15.9	-8.9
1963	16.4	13.3	3.2	48.0	50.0	-2.0	57.5	37.0	20.4	-5.4
1964	13.1	10.0	3.1	62.3	59.0	3.3	48.8	43.8	5.1	-11.1
1965	14.1	10.5	3.6	49.1	37.7	11.4	42.6	44.6	-2.0	8.2
1966	19.9	15.5	4.4	54.9	42.1	12.7	39.1	26.6	12.5	6.0
1967	20.1	15.7	4.5	51.9	33.2	18.7	40.2	21.7	18.5	7.9
1968	23.3	17.5	5.8	58.3	34.7	23.6	43.1	14.6	28.5	-1.4
1969	26.1	19.0	7.1	65.3	44.8	20.5	36.9	11.4	25.5	-2.2
1970	24.5	18.7	5.8	64.7	40.3	24.3	34.7	7.8	26.9	0.6
1971	22.8	17.5	5.3	60.9	39.4	21.4	42.5	7.0	35.4	-3.4
1972	20.6	15.4	5.2	72.5	56.0	16.4	24.2	7.6	16.6	3.3
1973	24.7	19.7	5.0	52.0	75.7	16.3	14.8	5.6	9.2	-6.8
1974	27.6	24.0	3.5	66.0	58.7	7.3	40.0	4.0	36.1	-6.1
1975	26.6	20.8	5.8	63.3	49.7	13.6	35.5	3.8	31.7	1.2
1976	24.9	20.0	4.8	50.6	66.4	24.2	9.5	5.0	4.5	-0.1
1977	27.1	21.0	6.1	92.1	71.6	20.5	2.2	2.3	-0.1	5.7
1978	30.2	24.8	5.3	84.7	63.9	20.8	10.6	3.2	7.4	4.8
1979	32.9	27.1	5.8	75.1	54.6	20.4	21.6	2.1	19.5	3.3
1980	28.6	22.3	6.3	63.2	43.6	19.6	32.4	2.5	29.8	4.4
1981	25.2	18.2	6.9	73.4	47.1	26.3	30.4	3.0	27.4	-3.8

Source: EPB: Major Statistics of the Korean Economy, 1982, 1983, p. 54.

therefore contradictory. Interest rates were positive to attract savings, but savings were not being turned into investment to prevent inflation.[101] The mechanics of credit limitations appear to have hit the agricultural sector worst and been partly responsible for record migration out of rural areas at the end of the 1960s.

By 1971 interest rates had fallen and many real rates remained negative until the major upheaval at the beginning of 1980. Yet despite the negative rate of interest, the domestic savings ratio remained high. Indeed although interest rates were negative, the savings ratio doubled between the late-1960s and mid-1970s, at the same time as the Government found it impossible to raise its share above the level reached in 1968.

This contradicts the evidence of the savings rate reform of the mid-1960s which led even Vos to believe that "interest rates have affected household savings behaviour".[102] Table 2.18 shows that household, private and non-profit institutions increased their share of savings. Unfortunately national income accounts do not distinguish between private households and households which are also responsible for unincorporated enterprises. Hence it cannot be automatically assumed that savers and investors are different entities. Nevertheless it has been shown in other countries that when wages are ahead of inflation, people tend to save more in times of rapid inflation even though real interest rates are negative.

The work of Kim and Park suggested that had the savings ratio been higher, then the inflation rate would indeed have been lower, and illustrate this from the experience of Taiwan where at the early stage of growth with low savings rates, Taiwan also experienced high inflation.

One thing is clear, in the Republic of Korea of the 1960s and 1970s, the role of the Government was crucial. Had it either pursued conservative and deflationary monetary policies, credit would not have been available to finance investment, or if it had not controlled credit allocation so tightly, the market might have rationed credit in very different ways. The peculiarity of the Republic of Korea was that financial institutions lay almost entirely within the public sector from 1960 onwards.[103]

If Government action could be beneficial it could also blight. The power over the financial system allowed a serious distortion of the economy in the

Table 2.19 Creation of credit and growth of the money supply

	国内信用 Domestic credit	通貨 Total money (M2)	通貨 通M1貨 Money	通貨 貯蓄性預金 Time & savings deposits	本源通貨 Reserve money	本源通貨 貨幣発行額 Currency issued	本源通貨 支準預金 Bankers' deposits	輸出支援金額 Loans for exports
	1. 増加率 : % Rate of increase : %							
1962	41.6	24.9	10.1	125.9	17.3	14.4	23.0	100.0
1963	19.7	7.4	6.3	5.7	-6.4	5.8	-34.1	68.8
1964	8.8	14.8	15.8	12.4	17.2	27.4	-21.7	-7.4
1965	40.1	52.7	35.3	111.0	48.0	26.2	180.9	84.0
1966	30.5	61.7	29.7	129.1	65.7	32.1	155.3	6.5
1967	78.2	61.7	44.5	83.9	38.3	46.5	27.3	240.8
1968	84.8	72.0	44.6	98.2	40.8	40.5	41.0	46.7
1969	59.2	61.4	41.7	76.7	38.3	35.7	42.3	43.5
1970	26.7	27.4	22.1	27.6	38.8	22.3	63.5	59.1
1971	30.9	20.8	16.4	23.0	-3.8	17.6	-28.0	43.5
1972	30.4	33.8	45.1	28.6	48.3	31.2	80.0	35.3
1973	31.7	36.4	40.6	34.0	46.0	44.3	48.2	106.4
1974	54.2	24.0	25.5	20.5	24.2	28.6	18.5	62.3
1975	32.2	28.2	25.0	32.1	39.0	23.4	61.1	-5.7
1976	21.7	33.5	30.7	34.5	33.5	31.3	35.9	36.3
1977	23.6	35.7	40.7	37.3	44.1	40.4	47.9	22.9
1978	45.9	35.0	29.5	43.0	35.3	44.3	26.3	55.7
1979	35.6	24.6	20.7	27.3	23.8	21.8	26.0	38.9
1980	41.9	26.9	16.3	31.3	-6.5	12.2	-47.0	40.2
1981	33.9	25.2	4.7	34.2	-13.6	8.2	-50.5	27.7

Source: EPB: Major Statistics of the Korean Economy 1982, 1983, p. 151.

1970s by an overallocation to industries designated as part of the Heavy and Chemical Industry Plan. This meant that both light industry engaged in exporting, and industry producing for the domestic sector, as well as housing investment was curtailed. With rising home demand this led to such serious inflation that the Government re-evaluated the entire system.

Although growth had been continuing rapidly, at the beginning of 1979 the Government convinced itself that only a monetarist policy could solve the Republic of Korea's problems and in 1980 raised all interest rates dramatically. In essence all the rules under which Korean development had taken place were reversed. As table 2.18 shows, private savings fell dramatically under this new policy, and substantial foreign savings were required. Firms lost their confidence in future growth. At the end of 1982 it cannot be said that the former level of confidence has been restored.

3. Sectoral appraisal: moving on

In a rapidly growing economy, the "production mix" and indeed the whole structure of the economy is constantly changing. It has been argued that the Korean economy moved rapidly through a succession of overlapping stages in the last 20 years. The discussion above identified different manufacturing sectors growing at different rates with wide differentials in labour productivity changes. In the 1970s productivity grew much more rapidly than in the 1960s.

To what extent was this the result of Government planning and to what extent market forces and entrepreneurial initiative? The Government policy is conveniently summarised in the following quotation: "In the process of industrialisation in the 1960s, priority was given to light industry because of the shortage of capital and low technical conditions. But since the Second Five-Year Plan emphasis has been given to the construction of heavy and chemical industries due to the limited effects of light industries in the accomplishment of economic self-reliance. ... The long term development plan of heavy and chemical industries was framed in 1972 to direct the development and define the role of the industries in accomplishing the one thousand dollars of per capita income ... by the early 1980s.[104]

The key phrase, self-reliance rather than comparative advantage and labour absorption indicates the change of mood of the 1970s. From the

Government point of view it was forcing the pace of "moving on". Industries were being created which market forces might not create for many more years. In moving on to this strategy the guiding star was Hoffman's coefficient of the ratio of value added in heavy and chemical industries to light industry. The fact that this ratio rose from 23.4 per cent of manufacturing in 1960 to 37.8 per cent in 1970 under the circumstances decribed above, is probably as remarkable as the rise from 39.3 per cent in 1971 to 50.7 per cent under Government sponsorship.

However the misconception lies in the quotations portrayal of the 1960s as only giving priority to light industry. The Government had tried since 1968 to stimulate both the machinery and the electronics industry, and had built a number of major plants itself, mainly in chemicals, fertilisers and metallurgical industries. The most successful was the integrated iron and steel mill at Pohang (POSCO). All the best advice was against building such a mill. Experts argued that the domestic market was too small to support an efficient plant. Taking this to heart, the Koreans built one twice as big as planned, with aid from Mitsubishi Heavy Industry, and laid it out so that expansion would be easy. At the time press reports suggested that the Japanese were merely making money out of the Koreans. In fact the plant became one of the most efficient in the world.

The efficiency lay not just in plant design but the use of labour. Although labour was cheap, this new generation of Korean industry did not overemploy. POSCO uses half the manpower per ton of iron and steel as British Steel even after the slimming down of the latter had begun. International comparisons with other heavy industry such as Hyundai Motor Company suggests that in addition to efficient plant, efficient use of labour, the plant was also, in comparision with Western plants, cheap to build. Neither the labour saving, nor capital saving aspects of the new generation of Korean industry have been adequately explored. For instance in the early 1980s Hyundai calculated they could build a plant for 60 per cent of the investment it would take Volkswagen or Toyota.[105]

Thus in little more than a decade, the leading edge of Korean industry moved from a wasteful use of labour to some of the most efficient plants in the world. To what extent was this the result of Government pressure and to what extent the rise of a new generation of business managers? The apparent answer seems to be that the Government pushed the entrepreneurs into new

industries, and the best entrepreneurs made those industries work, often against considerable odds.[106] The 1972 Heavy and Chemical Industry Plan identified six leading industries, the steel industry, the chemical industry, the non-ferrous metal industry, the machinery industry, shipbuilding and the electrical industry. The plan was not well constructed. In 1972 it projected that the percentage of heavy and chemical goods to total exports by 1981 would be 65 per cent. In fact it was marginally over 50 per cent. The capital required to build these industries was also greatly underestimated. As a result credit was allocated to these industries at the expense of all others. Table 2.20 illustrates this point. Subsidised loans as a proportion of total loans and credits increased from 30.7 per cent in 1965-1970 to 43.1 per cent in 1971-75 and reached an estimated 80 per cent of manufacturing loans by 1978.[107]

Of the six industries, only one, shipbuilding, which required large numbers of skilled workers was totally suited to the Republic of Korea's factor endowments. The electrical industry was conceived as being concerned as much with power generating equipment as consumer electronics. In practice only consumer electronics developed rapidly, and this was in line with the Republic of Korea's factor endowments. As will be seen in Chapter IV, the electronics industry was a success in terms of exports and employment, but only limited credit for this can go to Government planners who envisaged an electrical industry with a quite different structure.[108]

In theory the machinery industry looked like a potential winner, again requiring large numbers of skilled workers. In actuality it was again a failure, as it had been in the 1960s. The reason appears to lie in both product and production process. Unlike ships or transport equipment, the machinery industry requires not only great precision, but a fairly small scale of production. It is therefore a suitable sector for small and medium industry. But small and medium industry did not, in the 1970s, have access to the experience of the best technicians and managers who were employed by the large companies, nor could they afford the wages for the most skilled workers. There are other factors involved, notably consumer preference for imported machinery.[109]

The steel industry turned out, agains predictions, to be a very efficient enterprise, and in 1979 the second most important export category with 14.6 per cent of exports compared with 13.6 per cent in electronics.[110] The

Table 2.20 Share of investment going to heavy and chemical industry in the later 1970s (investment share by category)

	1976	1977	1978	1979*	1979**
Light industry	26	25	20	18	22
Heavy and chemical industry	74	75	80	82	78

Source: EPB Economic Survey 1979, p. 100.

*Share proposed under Heavy Chemical Plan.

**Revised share according to 1979 Economic Management Plan.

non-ferrous metal industry and the chemical industry were largely import substituting rather than export industries. The fact that value added has not risen in the 1970s suggests that these industries had only limited success.[111] The classic case at the extreme end of the spectrum was the Korea Aluminium Company which produced about a quarter of the Republic of Korea's needs at a price well above international prices. Even this price was heavily subsidised by KECO reportedly at 50 per cent less than production costs. All companies requiring aluminium were forced to buy one quarter of their needs from this company as a condition of an import licence.

This type of distortion is serious enough, but 1975 estimates put the cost of creating one job in the basic metals and chemical sector at US$ 31,888 compared with US$ 5,186 in the machine and electronics sector and US$ 4,970 in light industry. If investment was wrongly allocated in the period 1972-1980 then for every job in the metal and chemical industry, six could have been created in more labour intensive industries.[112]

Professor Wontack Hong has marshalled considerable arguments against the policy of giving cheap loans which the Heavy and Chemical Industry Plan encouraged. "Various Government policies often make capital relatively cheap and induce the adoption of capital intensive (imported) technology and/or the undertaking of capital intensive production. Such production may be profitable to the subsidised private entrepreneur but may imply a loss for the country as a whole when calculated in terms of real opportunity costs of capital. Moreover, the net effect of these policies may be to reduce employment opportunities and to retard the growth of GNP."[113]

In a world of unlimited production possibilities and limitless markets this would of course be true. The Heavy and Chemical Industry Plan was conceived as a strategy in a world in which manufacturing employment with low capital intensity could not be expanded indefinitely, althouth ironically traditional labour intensive export industries like clothing grew at their maximum rate at this time. It was conceived as a long term strategy which would ultimately yield a higher growth rate than further investment in textiles. This became steadily more true as trade barriers grew in the later 1970s and early 1980s.

Would alternative strategies have yielded higher growth rates or more employment? In assessing actual performance it is important to remember the lagged effect of plans on the economy. The great burst of exports in 1972 and 1973, the anni mirabilis of export-led growth were the results of the strategies of the second development plan which ended in 1971. The distortions in the economy at the end of the 1970s were the results of strategies adopted in 1972-73.

The slow-down in 1979, it must be remembered, was the result not of long-term planning but of a change in monetary strategy, and an overvalued exchange rate. But many Korean economists would argue that a slow down was merely accelerated by this change in policies, and would have occurred inevitably because the rest of the economy was being starved of capital. Up until 1979 there was no sign that the economy could have endured a higher rate of growth without serious sectoral inflation, unless more credit had been available for domestic industry (and not labour-intensive export industries). The employment situation was also extremely tight and as will be argued in Chapter III for structural reasons could hardly have yielded more workers for labour intensive manufacturing.[114] No one disputes the fact that too much

investment was going to favoured Heavy and Chemical projects, merely that a slight restructuring of credit might have satisfied all parties.[115] That this did not happen is a fundamental critique of the Government hold over the financial sector, and the use of high level Government intervention over the heads of the normal levels of bureaucracy.

As Chapter IV will show, although the textile industry was not favoured by the Heavy and Chemical Industry Plan, it still received a high proportion of Government subsidised loans, during nearly all the 1970s. This was because of automatic cheap credit for exports against letter of credit, textiles still commanding 33-40 per cent of exports during this period. The-90 day nature of these loans allowed a certain amount of capital investment, as did the profits from clothing. As a result, without discretionary favoured finance, the textile industry improved its productivity rapidly.

It should be noted that the figures for Table 2.21 are compiled by the Korea Productivity Centre, a private body and are widely regarded by senior economists as not having the same standard of accuracy as other Korean statistics. Nevertheless it can be seen that had textile productivity remained at 1971 levels, 110 per cent more workers would have been required, by 1978, i.e. another 762,000 workers. Even greater increases would have been required in most other industries. The notable exceptions were transport equipment, petroleum refineries, furniture and fixtures. Rapid productivity gains were made since 1975 in non-favoured areas such as food, beverages, footwear, printing and publishing and "others". These productivity gains were almost certainly forced on businesses by higher wages in other sectors, the result of a growing labour shortage requiring improved management measures.

Interviews in 1981-82 suggest that only after 1980 did enterprises receiving substantial Government backing go through the same process of reappraisal.

It is not necessarily a disfavour to deny sectors access to preferential capital if it forces them to reassess their methods of production. Without preferential capital, heavy industry would never have been built, nor could light industry have sustained a capital shortage forever, but it performed remarkably well up until 1978, and with more funds available in 1980 was able to make a rapid recovery.

Table 2.21 Labour productivity indexes

Year	3 Manufac-turing	31 Food etc	32 Textiles	33 Wood	34 Paper	35 Chemicals	36 Minerals	37 Basic metals	38 Machinery	39 Miscella-neous
1972	73.9	93.1	74.3	104.5	83.3	101.2	94.5	63.2	46.2	62.0
1973	80.4	95.5	82.0	98.1	96.1	105.5	97.2	69.7	58.5	67.8
1974	89.6	95.3	82.8	91.3	104.4	96.0	95.3	94.6	83.8	80.7
1975	100	100	100	100	100	100	100	100	100	100
1976	107.5	110.1	107.2	120.3	103.1	104.7	107.7	116.9	112.9	110.6
1977	118.7	127.9	115.4	117.3	121.3	113.8	110.5	119.9	122.0	148.0
1978	132.9	141.2	126.7	115.3	135.9	1342.1	130.7	119.7	142.3	148.7
1979	153.9	163.0	144.2	118.3	151.3	160.3	143.7	144.1	160.6	178.6
1980	170.3	176.9	171.7	108.8	174.2	163.1	136.9	183.6	162.4	228.2
1981	197.1	198.3	214.5	123.5	187.0	1762.1	140.9	238.2	192.5	209.1
1982	206.0	237	202.3	134.4	203.1	176.4	163.6	258.2	209.8	215.9

Source: EPB, Monthly Economic Statistics, Seoul, various issues
based on data provided by the Korean Productivity Centre

A much more serious criticism of the Heavy and Chemical Industry Plan would be that the plants created were inefficient by world standards because the scale was too small. In many cases, however, the schemes aimed precisely at avoiding this trap, and if anything they were too big. Nevertheless the Korean Government after the lessons of POSCO was more than aware of the need to build on a sufficient scale. Chemical plants proved more of a problem. As Chapter IV shows plants were planned at the optimum size where economies of scale yielded diminishing returns. However the plan did not foresee the great advantages chemical plants in oil producing countries would possess, and Korean downstream products remain well above world prices.

Table 2.22 shows that for an economy like the Republic of Korea with few natural resources, it is difficult to raise value added in a period of rising raw material prices. During the twenty years the ratio of value added to output has risen only marginally by 0.4 per cent in light industry and fallen by 3.5 per cent in heavy industry. Constant 1975 prices (which reflect post oil-crisis raw material prices projected back into the past) show the marginal increase in light industry becomes a fall of 2 per cent and in heavy industry 1.8 per cent. Given that so much investment has gone into industries which had a strong import substitution effect, the failure of value added to change is noteworthy.

By contrast the calculations of the Ministry of Commerce and Industry indicate a rapid increase in value added in manufactured exports from 46.6 per cent in 1970 to 64.4 per cent in 1979, and that the import content of exports fell from 53.4 per cent to 35.6 per cent. The method of calculation is however extremely crude being based on no more than imports declared as for export use.[116] Not all inputs into exports are included in this process, notably imported fuel, chemical products refined in the Republic of Korea and many others. The rise in value added between 1970 and 1979 may therefore be a measure of the growth of import substitution, but overestimate its actual value. It is impossible to go further at this point than Westphal and conclude "data limitations make it virtually impossible to assess trends in the domestic value added content of exports."[117]

Unfortunately the census of production figures make no distinction between domestic and imported inputs. They show that the average rate of value added in manufacturing is 38 per cent. For industries using primarily imported inputs, the total domestic value-added will be this figure, plus

Table 2.22 Ratio of value added to output in manufacturing

	At Current Prices			1975 In 1975 Constant Price		
	Manufacturing	Light Industry	Heavy & Chemi -cal Industry	Manufacturing	Light Industry	Heavy & Chemi -cal Industry
1960	29.1	29.7	31.1	28.6	29.1	26.1
1961	30.6	30.2	32.0	29.2	29.8	27.1
1962	29.4	28.7	31.3	28.2	28.8	27.8
1963	30.8	30.3	31.9	27.2	27.5	26.6
1964	33.0	33.1	32.7	27.7	28.1	26.7
1965	31.3	31.3	31.3	27.7	28.4	26.3
1966	31.7	31.0	33.3	27.8	28.7	26.3
1967	30.6	29.9	32.0	27.7	28.6	26.3
1968	29.7	28.8	31.5	27.3	28.2	25.6
1969	31.0	30.3	32.2	27.2	28.2	25.8
1970	31.1	30.6	32.1	27.3	28.5	25.8
1971	29.8	29.0	42.4	27.3	28.5	25.7
1972	29.4	29.7	28.8	26.8	27.8	25.5
1973	27.7	27.5	28.1	26.4	27.2	25.3
1974	28.1	25.3	31.6	26.3	27.7	25.0
1975	26.3	27.5	25.1	26.3	27.5	25.1
1976	27.6	29.0	26.1	26.0	27.1	25.0
1977	28.5	29.4	27.3	26.0	27.1	25.1
1978	29.7	31.2	28.2	26.2	27.4	25.3
1979	28.8	30.1	27.6	25.9	27.1	24.9

Source: EPB: Major Statistics of the Korean Economy 1982

value-added in shipping from manufacturer to ship. Westphal assumes that there is a built in bias towards imported inputs. "The system has not discriminated between imported and domestically produced intermediate inputs (if the same quality) in the production of exports, except in so far as wastage allowances on imported inputs provide a bias in favour of domestically produced inputs."[118] The degree to which imported inputs would be preferred depends on the degree of protection of the domestic market and currency overvaluation. In the Republic of Korea's case, Westphal argues both were low, while the Government used the domestic letter of credit to give "the full range of export incentives to producers of intermediate goods supplied to exporters to negate the remaining bias. Suppliers of exporters have thus been permitted access to intermediate inputs at world market prices, the same as exporters."[119]

This is undoubtedly what the regulations appear to say. But in the Republic of Korea the written regulation and practice do not always coincide. Interviews with intermediate producers suggest that domestic producers of inputs for exports cannot automatically expect favourable credit or import exemption. This has become more serious since 1975 when tariff exemption was changed to a drawback system. Under the latter system the manufacturer could not be sure he would receive the drawback until it actually happened, with consequent interest charges, transaction costs and paperwork.

On the other hand exporters report deep concern about the pressure from Government and quasi-Government organisations to buy Korean, even if the product is more expensive and/or inferior. The case of the Korea Aluminium Company has been noted above, but widespread complaints about the price of Korean chemical products are voiced. These instances highlight one of the persistent problems in analysing the Korean economy, that while regulations suggest a free and perfectly functioning system, governmental pressure and often contradictory pressures make actually running a company much more complex.

From this point of view, the current Government strategy begins to make a great deal of sense. In the 1970s the Government was concerned with accelerating structural change both between manufacturing sectors and within the economy as a whole. In the 1980s current Government thinking suggests that most attention should be placed on liberalising the economy. The problem is that this may be described as "sideways change" rather than progress. It

will change the environment under which existing industry operates, but will not immediately increase either output or productivity. Clearly within the existing structure there are widespread inefficiencies, but rather than deal with these the Government is proceeding to liberalise other areas of the economy which greatly change the parameters within which business functions. It could well be that only this sort of "sideways change" will permit further rapid growth, but it must be recognised that this period of readjustment is likely to be one of considerable disorientation for much of the economy, and of uncertainty both for administration and businessmen accustomed to the old system.

4. Evaluation and change required

The Republic of Korea's pace of development has been rapid over the past 20 years and passed through a number of overlapping phases. The confidence of the late 1960s and much of the 1970s has given rise to uncertainty about the future course of the nation. To some extent this uncertainty is masked by the Fifth Plan's desire to see industrial policy based more on the market mechanism and less on Government intervention. In only one dimension is the Government certain, future growth will be based on export expansion.

But this is the one area where most uncertainty lies. The Republic of Korea's prospects depend not only on a recovery of the world economy (now considerably delayed) but also on at the very least a static level of trade barriers. Australia is closely followed by France as leading defenders of their domestic markets against Korean imports. But many of these countries also enjoyed a substantial trade surplus with the Republic of Korea in the same year. The Republic of Korea has now announced it will implement selective discriminatory measures against such countries. Such a process can only lead to a further disintegration of the international economy.

Apart from steel, heavy and chemical industrial products attract fewer quotas than light industry. This has undoubtedly encouraged Korean heavy industry. This situation cannot continue. Motorcars and other vehicles are heavily protected, and as the British subsidy for the replacement of the Atlantic Conveyor to prevent it being built in the Republic of Korea showed, governments are willing to resort to various measures to protect their industries, falling short of actual quotas.

Table 2.5 The Republic of Korea's Exports under Restrictions

(in US$1,000)

	1978			1979			1980			1981			1982		
	Total Exports (A)	Exports under restrictions (B)	B/A (%)	Total (A)	Exports under restrictions (B)	B/A (%)	Total (A)	Exports under restrictions (B)	B/A (%)	Total (A)	Exports under restrictions (B)	B/A (%)	Total (A)	Exports under restrictions (B)	B/A (%)
United States	4,058,345	1,861,522	45.9	4,373,929	1,876,371	42.9	4,606,625	2,246,902	48.8	5,660,593	2,685,962	47.5	6,243,179	2,807,790	45.0
Canada	327,173	52,791	16.1	387,643	166,544	43.0	343,446	174,601	50.8	483,501	220,667	45.6	442,806	216,623	48.9
Japan	2,627,266	571,602	21.8	3,353,028	685,448	20.4	3,039,408	563,660	18.5	3,502,785	544,833	15.6	3,388,106	536,711	15.8
Australia	148,828	57,564	38.7	156,967	57,558	36.7	230,371	78,801	34.2	293,567	102,229	34.8	307,387	167,655	54.5
New Zealand	21,721	21,721	100.0	24,041	24,041	100.0	28,032	28,032	100.0	36,640	36,640	100.0	69,751	69,751	100.0
France	208,598	67,835	32.5	249,465	95,555	38.3	291,228	127,252	43.7	402,984	129,281	32.1	263,594	128,501	48.8
U.K.	393,029	158,663	40.4	541,605	272,781	50.4	572,532	241,807	42.2	705,012	321,854	45.7	1,102,646	280,747	25.5
West Germany	662,884	261,536	39.5	845,340	355,431	42.0	875,486	377,748	43.1	804,487	378,387	47.0	757,918	343,541	45.3
Italy	117,840	33,267	28.2	153,891	53,985	35.1	229,447	101,210	44.1	144,569	43,190	29.9	154,082	44,324	28.8
The Netherlands	307,287			330,694			349,506			327,932			350,557		
Belgium	94,443	122,539	30.5	118,940	145,608	32.4	139,020	166,570	34.1	174,420	175,158	34.8	119,929	172,370	36.6
Luxembourg	260			428			72			372			152		
Greece	27,571	5,378	19.5	42,165	10,794	25.6	80,119	30,810	38.5	63,714	14,646	23.0	24,595	9,989	40.6
Denmark	50,082	70	0.1	69,015	31,612	45.8	60,104	38,233	63.6	51,136	26,424	51.7	54,902	24,444	44.5
Ireland	16,451	13,989	85.0	23,732	6,956	29.3	21,987	3,938	17.9	20,325	8,194	40.5	12,594	6,716	53.2
Norway	68,815	4,014	5.8	53,346	3,613	6.8	51,612	4,686	9.1	288,246	5,879	2.0	525,322	6,098	1.2
Sweden	157,652	26,107	16.6	116,302	34,760	29.9	127,342	43,772	34.4	127,022	44,890	35.3	129,947	42,117	32.4
Austria	52,383	17,515	33.4	46,397	14,162	31.5	58,616	13,905	23.7	50,039	13,157	26.3	50,980	13,582	26.6
Finland	59,401	676	11.4	20,308	1,488	7.3	26,846	2,120	7.9	29,101	2,034	7.0	38,073	3,291	8.6
Total exports to 19 nations	9,400,029	3,276,789	34.9	10,907,236	3,836,707	35.2	11,131,799	4,244,047	38.1	13,166,355	4,753,425	36.1	14,036,520	4,874,253	34.7
Korea's Total Exports	12,710,642		25.8	15,055,453		25.5	17,504,862		24.2	21,253,757		22.4	21,853,394		22.3

Concentration of heavy and chemical products has enhanced the Republic of Korea's potential to export to Third World countries. As was noted above, nearly a third of the Republic of Korea's exports go to non-OECD countries. These are countries in which traditional Korean exports have small markets, but the potential for the sale of capital goods and cheap motorvehicles is much larger. How far the Republic of Korea can develop its Third World markets depends partly on the growth rate of African, South American and Asian countries in the 1980s, but also on an area the Republic of Korea is well experienced in, economic diplomacy. By making bilateral deals, the Republic of Korea can hope to compete with Western countries, and erode their shares of Third World markets. This in turn depends on the Korean ability to provide long term credit to developing countries.

Some of the promises and pitfalls of this strategy will be examined in Chapter V. All that needs to be observed at this point is that it may be a potentially viable approach to keeping Korean exports growing in the 1980s in the face of trade barriers in the Western world.

It should, however, be noted that this is an expensive strategy, in terms of dollars per job created or sustained in the Republic of Korea. From the Republic of Korea's point of view, the dangers of rising unemployment are considerable. In this context the critique of Korean employment statistics given above is important, since under the existing system, unemployment could rise dramatically without the Government being aware that more than a marginal increase had taken place.

Unemployment fell according to official statistics from 1961 to 1978. It rose in 1979 and 1980, although the total number employed also rose. However employment in manufacturing actually fell, and the new jobs were created in the service sector. In 1982 unemployment continued to fall. However it is expected to stay slightly above 1978 levels during the Fifth Five-Year Plan with between 600,000 and 700,000 unemployed.

To achieve this, employment will have to expand at about 3 per cent per annum, or at a rate of over 500,000 jobs per annum. E.P.B. estimates during the planning process were that a growth rate of 7-8 per cent was necessary to achieve employment creation on this scale. In the last two years growth has only touched 6 per cent, and employment has been sustained by a growth of marginal jobs in the service sector. To actually increase labour productivity

in the economy, a faster rate of growth is required. This would allow the continuing transfer from agriculture - a process the Fifth Plan sees as slowing down, and also to cope with the new technology of the microchip which poses a special challenge to a country like the Republic of Korea. Essentially in an export-led economy, the largest firms cannot afford to ignore the latest technology in order to remain competitive with their international rivals. There is no doubt that the chaebol are large and rich enough to import the latest technology, even if this is labour saving. This problem is taken up in Chapter V.

The possibility of using the domestic economy as a "second engine of growth" is an option canvassed in business circles and some government departments. To a considerable degree the pre-1979 concept of national self-sufficiency served as a stimulus to the domestic economy and as a counter balance to export promotion. Since 1979 the second engine of growth has largely been seen in classic terms as stimulating the economy through investment in social overhead capital, rather than domestic purchasing power. It is not a strategy endorsed by the Fifth Five-Year Plan, but implicit Government policy in 1982 especially relaxing the money supply and lowering interest rates support this strategy.

If a domestic growth strategy can be devised it will certainly boost employment. Most export oriented industry now has surplus capacity and a reluctance to take on more labour. Domestic industry does not operate under the same constraints of international competitiveness.

But even with full employment, the distribution of income during the 1970s deteriorated. From its position in 1970 in the low inequality category as defined by the joint IDS/World Bank study, the Republic of Korea slipped into the moderate inequality category. The Fifth Five-Year Plan aims to raise the share of income of the bottom 40 per cent from 15.5 per cent in 1980 to 17.5 per cent in 1986. But this remains well below the 19.9 per cent of 1970. Pre-tax income is not always the best measure of the prosperity of the country and redistribution of income. The Fifth Plan sees an expansion of social welfare facilities, at present either inadequate or non-existent. Pension coverage for nearly 30 per cent of employees, at present confined to civil servants from military to bureaucrats and a limited number of large companies, will be introduced. The percentage of households with their own dwelling units will rise from 75 per cent to 78.6 per cent and of houses with main sewers from 8 per cent to 25 per cent.

All these measures are likely to benefit those with regular permanent employment, or the richer self-employed, not the lowest income groups. For the bottom 25 per cent of households, the prospect of an unshared dwelling unit is as bleak as ever.[120] Under the 1979 poverty relief programme 486,000 households, comprising 1.99 million persons or 5.3 per cent of the population, received relief. These were households defined as below the absolute poverty line who received free middle schooling, free medical care and for whom work was provided. It should however be noted that at the wage rate paid under the work relief programme, a male worker with three dependents or a woman worker with two dependents would still be below the absolute poverty line.

The Republic of Korea's development has been impressive and compared with the starting point twenty years before, the transformation has been remarkable. But the problems of continuing growth during the next decade remain. The Republic of Korea still has a per capita income below that of most Latin American countries which have become "stuck" at a certain level of development. Moreover poverty does not cease to exist with development, and the Republic of Korea, at most half way to development in per capita terms, has to begin to think out what strategy might assist the poorest 25 per cent of households.

References

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2. J.M. Allison: Ambassador from the Prairie, Tuttle, 1975, pp. 267-8; for further discussion of this issue see T.Michell: "The Transitional Economy", Journal of Korean Studies, Vol. 4, 1982. It is interesting to note that Japan came under the same sort of policy pressures, to maintain a large military establishment, stabilise the economy rather than increase industrial production, and accept bulk commodity aid; the Japanese were however able to resist these pressures, J.W. Dower, Empire and Aftermath, Harvard, 1979, pp.415-485.

3. These plants were only constructed after long arguments with aid donors.

4. Park Chung-hee: The State, Revolution and I, Seoul, 1963, pp.19-43.

5. Cole and Lyman: Korean Development: The Interplay of Policics and Economics, Harvard, 1971, p.80.

6. EPB: First Five-Year Economic Plan 1962-66, 1961, pp.1, 2, 29.

7. EPB: Draft First Five-Year Economic Plan 1962-66, p. 336.

8. EPB: Adjusted First Five-Year Economic Plan 1962-66, p. 2.

9. W.A. Lewis: Development Planning, London 1966, p.17.

10. There is a long history of struggles against the unofficial money market.

11. J.H. Gurley, Hugh Patrick and E.S. Shaw: Financial Development in Korea, Seoul, U.S.O.M., the Republic of Korea, August 1965.

12. Kim Kwang-Suk: An Appraisal of the High Interest Rate Strategy of Korea, cited in Cole and Lyman, pp. 180-1,298.

13. A. Krueger: The Development Role of the Foreign Sector and Aid, Harvard, 1979, p. 166.

14. See sub-section 2.

15. See Chapter II, sub-section 1.

16. Cole and Lyman, p. 213.

17. I.B.R.D.: Comprehensive Transportation Survey of Korea, 1966. (Three volumes mimeographed.)

18. See sub-section 2.2

19. L. Westphal and I. Adelman: "Reflections on the Political Economy of Planning: the case of Korea", in Jo Sung-hwan and Dark Seong-Yawng, Basic Documents and Selected Papers of Korea's Third Five-Year Economic Development Plan 1972-76, p.14.

20. Ibid. p. 26.

21. Ibid, p. 25.

22. Westphal and Adelman, pp. 26-7.

23. Professor Choe Sang-Chul of S.N.U., who was involved in the early planning processes tells me that the delay was due to the lack of skilled planners in the 1960s. This however, in the context of Korean decision making sounds more like an excuse in the face of fundamental disagreement than a reason.

24. Bela Balassa records that he argued to get investment switched towards areas where comparative advantage might apply - such as ship building and away from areas where it could not.

25. Unfortunately no English translation of the plan appears to be available while Korean plans were considered top secret.

26. L. Krause: "Economic Interaction in the Pacific Basin; KIEI Seminar, series No.19, KIEI, Seoul, p. 9.

27. At constant 1975 prices.

28. See the section on the financial structure.

29. For more detailed discussion of these changes see Tony Michell "What Happens to Economic Growth when Neo-Classical Policy Replaces Keynesian? The Case of South Korea": IDS Bulletin, December 1981, 13, pp. 60-67. For a discussion of "Korean Keynesianism", see Tony Michell: Korea under the Fourth Five Year Plan 1977-1981 (forthcoming).

30. A Summary Draft of the Fifth Five-Year Economic and Social Development Plan 1982-86, E.P.B., September 1981, pp. 9-10.

31. Ibid, 10.

32. Ibid, 11.

33. Ibid, 12-13.

34. Fifth Five-Year Plan, p.28.

35. Ibid, p.12.

36. W.A. Lewis: Development Planning, London 1966, p. 18.

37. For more detailed breakdown, see Appendix Table 3.

38. Construction, electricity, gas and water and transport, storage and communications all achieved an average growth rate 62-80 per cent higher than manufacturing, while other components in the tertiary sector were lower. Ownership of dwellings contributed a mere 3.9 per cent per annum and public administration and defence 3.1 per cent.

39. Although the contribution of agriculture to GNP is slightly higher, labour force participation is close to that of Japan, Finland and Ireland in 1960.

40. For a thorough analysis see Larry E. Westphal: "The Republic of Korea's Experience with Export-Led Industrial Development", World Development, 1978, Vol. 6, No.3, pp. 347-382, and bibliography.

41. For one summary see L. Krause and Sueo Sekiguchi: "Japan and the World Economy" in Patrick and Rosovsky: Asia's New Giant, 1975, pp. 398-401.

42. Even in agriculture and mineral products, imported inputs are used in the Republic of Korea.

43. It is important to note that neither table is published in the Korea Statistical Yearbook which indicates EPB considers both series suspect, and relegates them to the Handbook of Korean Economy which is an interim version of the Statistical Yearbook primarily for the use of Government officials. It has not been published since 1980.

44. That is additional demand created by workers in exporting who would otherwise be underemployed.

45. It is assumed that Governments must intervene to ensure the best trade-offs between maximum growth, and imbalances which will result in a less than optimum growth rate. Each Korean plan engendered a fierce debate about how fast a growth rate was best.

46. I have followed G.B. Stafford: The End of Economic Growth?, London 1981, p.9-11 in distinguishing between potential and actual growth.

47. The concept of normal is used in the sense that, in the real world, markets are rarely perfect. It might be described as the standard deviation between observation and theoretical prediction.

48. For further details see Tony Michell: "The Transitional Economy", Korean Studies Journal, Volume 4, 1983.

49. See statistical appendix, Table 4.

50. Ban et al.: Rural Development, pp. 213-6.

51. By comparison private loans reported during the freeze on private credit in 1961 amounted to 33 million dollars, of which half were at interest rates of more than 20 per cent, Ban et al, Rural Development, p. 215.

52. The First Plan actually envisaged reducing the size of Seoul, then only a quarter of its 1978 size.

53. W. Rostow: "The Economics of Take-Off" Economic Journal, 1956, later modified and incorporated into The Stages of Economic Growth, Cambridge 1960. Although Rostow's ideas, or at least terminology, has been around for a long time and his historical hypotheses tested e.g. B.E. Supple ed.: The Experience of Economic Growth, 1963, and extensive work of Fogel, Fishlow and others on railways as leading sectors, the theoretical implication of some of his ideas have never really adequately explored. For one attempt see A.O. Hirschman: The Strategy of Economic Development, Yale, 1958, based on Rostow's original article.

54. See T. Michell: "The Economic Crisis of the Early 1970s", Journal of Korean Studies, (forthcoming).

55. W. Rostow: The stages of economic growth, pp. 51-53.

56. Under Japanese colonial rule, the mines had been developed to export the mineral resources of the Taebeck region directly back to Japan.

57. See Table 5 in statistical appendix.

58. Park Chung-hee: Our Nations Path, 1962, pp. 217,218.

59. L. Jones: Public Enterprise and Economic Development: The Korean Case, KDI, 1975.

60. Sufficient equity in certain private enterprises to reduce Government investment below strict total control took place from 1968. Data from Appendix. See also Jones and Sakong: Government, Business and Entrepreneurship, p.128.

61. Both cases have a complex history, for Shinjin see Jones and SaKong, op cit., p. 128-131.

62. Under Syngman Rhee there were actually three trade bans placed on Japanese trade.

63. For import regimes see pp. 82 et seq.(??): No mention is made of the vexed issue of import substitution as a source of growth. Existing estimates of its contribution appear to be positive, though of decreasing importance after 1963, see Kim and Roemer: Growth and Structural Transformation, Cambridge Mass, 1979, pp. 94-124, although on the authors preferred method (Syrquin's Method-First Difference) the results are negative, pp. 120-121. See also Suh Suk-Tai: Import Substitution and Economic Development in Korea, KDI, 1975.

64. Figures from World Bank: World Development Report, Washington. D.C. 1980.

65. The initial reaction was to suspect that the fluctuation which was at its peak in June was related to non-farm households taking part in seasonal farm activities. However the total number of economically active members of farm households in June exceeded the total number employed in agriculture, forestry and fishing, etc., so the flow was in the other direction. New questions have recently been added to the survey and these may clarify some of these problems.

66. Agricultural employment dropped in 1975, but rose again in 1976 and then definitely fell.

67. Excluding those employed in manufacturing establishments employing less than 5 persons.

68. It may be that this merely reflects a growth in small firms previously under the minimum size classification.

69. The increment is the total for 1977 with that for 1972 subtracted. Because of the nature of the source, the figure for 1972 is not the year end but the average for the year, and therefore about mid year.

70. See table 3.4., p. 62 of Wontask Hong's Trade, Distortions and Employment, KDI, Seoul 1980.

71. The extra growth of exports beyond the levels predicted would appear to account for the higher growth rate than predicted in the plan. The other calculations were reasonably accurate.

72. Use of four digits yields similar percentages for 25 products.

73. I have been unable to determine how constant dollar data was calculated in the Fourth Plan. Two ways are possible, to deflate by the dollar deflator, and to change dollars into won at 1981 exchange rate, or to deflate by the won deflator and reconvert at 1975 exchange rates. The latter has been used as more accurately reflecting the impact on the Korean economy. This results in deflating dollars by 2.01 (the won deflator over the same period is 2.91, which illustrates the fact that the rate of devaluation in 1981 had not matched inflation over the Fourth Plan period.

74. See ARTEP, The General Trading Companies of Japan and Export-Led Industrialisation, ILO, Jan. 1980, pp. 25-28.

75. Prof. Koo Bon-ho, who was closely involved in planning this strategy, has pointed out in conversation that it was a gamble and that had the delay in recovery in Japan and the U.S. been extended a further six months, the economy might have run into serious problems.

76. The grain was wheat, the Republic of Korea producing hardly any wheat. This allowed bread prices to remain low, although consumers preferred rice, so that consumer preference prevented wheat from competing with Korean agriculture in the 1960s and 1970s. In the 1950s barley had been important.

77. The former U.S. AID building is now the Embassy.

78. A study of the issues of the Far Eastern Economic Review and other economic journals of the early 1960s suggests subcontracting and bilateral deals were concluded by Japanese companies prior to the normalisation.

79. This statement is qualified by a small scale study of the problems of small firm engaged in exporting conducted in 1979-80 where a shortage of long term capital was clearly a serious problem.

80. In 1979 for instance, it was argued that devaluation would create an advantage for only six months.

81. In many areas imports were not competitive. The overvalued exchange rate in 1978 and 1979 made domestic agricultural prices look much higher than world prices, increasing a sense of hopelessness in the agricultural sector. After 1980 they looked much more respectable.

82. Always excluding the curb market, hence the governments continual preoccupation with bringing the curb market under control, see D.C. Cole and Yung Chul Park, Financial Development in Korea 1945-1978, Cambridge, Mass., 1983, pp. 110-170.

83. See Chapter III, section 6.

84. See Chapter III, section 6.

85. See Chapter III, section 6.

86. D.C. Cole and L.E. Westphal: "The Contribution of Exports to Employment in Korea", in Hong and Krueger, Trade and Development in Korea, KDI, 1975, pp. 89-102.

87. Westphal was able to use the computer tapes and the export assistance of BOK and KDI in conflating tables with different numbers of sectors, p. 91. While BOK offered every assistance, time constraints prevented this analysis for the present study.

88. These figures simply assume that the ratio of labour share to export share of final demand was the same as in 1970, 0.86 per cent.

89. Technically there are no commercial relations with communist countries, in practice the Koreans are not ideologically dogmatic about whom they sell to. Unclassifiable exports have risen from 27.5 million dollars in 1979 to 943.5 million dollars in 1981.

90. A similar market developed in Vietnam during the war period when not only Korean soldiers but also a considerable number of civilians were employed in construction activities. Korean statistics are at their most opaque when dealing with trade to Vietnam, goods supplied to the military frequently being excluded. T. Brown, Korean Pricing Policies and Economic Development in the 1960s, John Hopkins, Baltimore 1973, pp. 152-154.

91. Information supplied by KOTRA. In 1980 France suffered a trade deficit with Korea for the first time. Nevertheless the EEC countries have consistently had a trade deficit with the Republic of Korea, largely attributable to the extremely unfavourable balance of the Netherlands, which in 1979 was more than 100 per cent of the total EEC deficit with the Republic of Korea.

92. G. Renshaw, ed.: Employment, Trade and North-South Cooperation, 1981.

93. A recent Sussex Ph.D. Thesis by Richard Luedde-Neurath "Import Controls and Export-Oriented Development: A Re-examination of the S. Korean Case", 1984 deals with these reforms in great detail. I am indebted to him for clarifying various issues connected with import policy. According to Leudde-Neurath's analysis the account given above fails to emphasise informal controls adequately.

94. See Table 2.12.

95. In July 1983, it was announced that the scale of foreign investment would be reduced under a revised Fifth Five-Year Plan to be issued in December.

96. Norton and Rhee: "A Macroeconometric Model of Inflation and Growth in Korea", KDI, 1979, p.2.; Taylor Lance: Macro Models for Developing Countries, McGraw Hill, 1979.

97. Norton and Rhee: ibid, p.2.

98. Norton and Rhee: Ibid, p.2; see also Kim Mahn-je and Park Chul-yung: "A Study of Savings Behaviour 1953-1972" in Kim Chuk-kyo ed.: Planning Models and Macroeconomic Policy Issues, KDI, 1977, pp. 155-191; Rob Vos: "External Dependence Capital Accumulation and the Role of the State: South Korea 1960-77", Development and Change, 13, 1982, pp. 91-121.

99. H. Chenery and Eckstein: "Development Alternatives for Latin America", Journal of Political Economy, 1970, 966-1006; H. Chenery and A. Strout: "Foreign Assistance and Economic Development", American Economic Review, 1966, 679-733.

100. Kim and Park, pp. 168-173.

101. Kim and Park, pp. 171-2.

102. Vos, p. 105.

103. Cole and Park: Financial Development in Korea 1945-78, Cambridge, Mass. 1983, examine some of the opposing viewpoints on the interest rate reforms, pp. 198-211. This outstanding book appeared too late to incorporate all the analysis into the present work.

104. E.P.B.: Economic Survey of the 1972 Korean Economy, pp. 11-12.

105. This comparison emerged as the result of detailed negotiations between Hyundai Motor Company and Volkswagen and Toyota over possible joint ventures 1979-81.

106. See the discussion of the Changwon project, sub-section 3.2 (iv) (CHECK SECTION NO.??).

107. Lee Suk-chae: Growth Stragegy and Income Distribution: Analysis of the Korean Experience, KDI, 1981, p. 148 and E.P.B. estimate.

108. See sub-section 4.3 (CHECK SECTION NO.??).

109. This consumer prejudice was probably accurate when formed, but textile companies now report modern Korean textile machinery is as good as imported.

110. This was a reversal of previous trends and may be due to short term factors. It was however repeated in 1980.

111. Or that imports would have risen much faster.

112. Hasan and Rao: Korea Policy Issues for Long Term Development, John Hopkins, Baltimore 1979, p.264. Unfortunately text and footnote 22 disagree. The main text suggests investment in machinery necessary to produce one job was less than in light industry. It is not clear if these are average or marginal values.

113. Wontack Hong, Trade, Distortions and Employment Growth in Korea, KDI, Seoul 1979, pp. 146.

114. See Chapter III, section 7.

115. This in fact was agreed on in 1979, but further cut backs were made in late 1980.

116. A highly suspect calculation. These figures were used in earlier calculations precisely because they overstate rather than understate the contribution of exports.

117. L. Westphal in Hasan and Rao: Korea Policy Issues for Long Term Development, 1979, p. 247. See also D.C. Cole and L. Westphal: "The Contribution of Exports to Employment in Korea", in Hong and Krueger, Trade and Development in Korea, 1975.

118. Westphal, in Hasan and Rao, p. 247.

119. Westphal, in Hasan and Rao, p. 247.

120. The dwelling ratio for 1986 is 78.6 per cent. The 21.3 per cent will be living in the houses of the next poorest 15-20 per cent, so that only about 55-60 per cent of households will enjoy single occupancy.

CHAPTER III

THE DYNAMICS OF DEVELOPMENT

1. The Government Sector

1.1 Introduction

A complete analysis of the Government's role in Korean development is impossible within the limited space available. As actor, the Government has been pervasive in every sector of the economy. This activity is enshrined in the constitution itself, which declares "The State shall regulate and coordinate economic affairs within the limit necessary for the realisation of social justice and for the development of a balanced national economy to fulfill the basic living requirements of all citizens". Furthermore all mines and important resources were to be owned by the State, agricultural tenancy was prohibited, while the State "shall encourge the foreign trade, and shall regulate and coordinate it".[1]

The present policy of the Government is designed to reduce the amount of direct involvement, justifying the change in direction in terms of neoclassical theory and the mistakes in investment in the 1970s. However a case could also be made for regarding the high level of Government involvement between 1960 and the mid-1970s as being highly beneficial, while justifying a reduction in Government involvement on the grounds of the increasing complexity of the economy. In the latest revision of the constitution in 1980 the additional duties of "properly" regulating and coordinating monopolistic and oligopolistic practices, guaranteeing consumer protection and protecting and fostering the business activities of small and medium industries have been added.[2]

In framing the first economic plan it was explicitly stated that the Republic of Korea should "develop guided capitalism" in which the Government "shall either directly participate or indirectly render guidance to the basic industries and other important fields".[3] This was a natural choice for the Republic of Korea since it was close to Korean's experience of the stance

taken by the Japanese Government both in the Republic of Korea and in Japan during the Meiji and Showa eras. It was even closer to the experience of Manchukuo 1931-1945 in which a number of influential Koreans had participated.

State participation was devoid of socialist implications in the South Korean context. However, it might be argued that the State exceeded the provision of the constitution that "private enterprise shall not be transferred to the State or public ownership nor shall their management be controlled or administered by the State except in cases determined by law to meet urgent necessities of national defense or national economy".[4]

But neither the 1960 democratic Government, nor the 1961 military Government had any time for those who filled their own pockets regardless of the national interest. The First Plan roundly condemned the activities of bureaucrats, bankers and businessmen under the Rhee Government, and "illicitly gained wealth" was confiscated including ownership of the major banking institutions. Throughout the period of development there has been a distinction between "profit for private gain" and "profit made while acting in the national interest".

The military origins of the Republic of Korea's new leaders obviously made the choice of strategies simpler. Armies are not noted for being run on laisser faire or private enterprise principles. Moreover the coup stemmed not from political jockeying but from a fundamental nationalist desire to "get the Republic of Korea moving".[5] The result was the the Republic of Korea's new leaders were probably not aware that they were making a conscious choice of strategies; the alternatives never seemed viable.

1.2 Restructuring the Government for growth in the 1960s

Dr. Lee Hahn-been in his study of administration in the Republic of Korea between 1948 and 1965 argues that in 1961 the military was the best trained managerial group in the country. "After one decade of systematic training the military had acquired a substantial store of managerial capability which was not matched in scope or depth by other subsocieties and institutions ... the army was one of the most intensively westernised sectors of the society in terms of work tempo and work habits ... . In terms of skill level and civilian exposure, the Military Revolution elevated the tactical operational class (the colonels) to positions of power, placing the strategic-managerial class under the control and direction of the former".[6]

By elevating the tactical operational class, the Military Revolution gave the Government's implementation of the first plan its special characteristic. For such a group, the plan set out a clear programme of goals which were to be attained by whatever means were possible. It was natural too, that logistics would play a vital role in such a plan. Some 49 per cent of investment was to go on infrastructure, electric power, transport and communications and housing.

Equally important, the new military/managerial class owed nothing to the existing civil service, and felt free to remodel it, promote and fire whom they pleased. The result was that, in the civil service as in the military, younger men were promoted over the heads of seniors. Central bureau directors and new senior clerks were notably younger than their subordinates.[7]

As with personnel, so with institutions an extensive remodelling took place. Between 1961-1963 three overlord ministries were created which would superintend all other economics ministries. The first was the Economic Planning Board. The Ministry of Reconstruction, of which the Economic Development Council had been a sub-agent was remodelled, along with the Bureau of Budget from the Ministry of Finance, and the Bureau of Statistics of the Home Ministry. This overlord ministry was to not only plan development, but implement it through budget allocation, coordinate foreign aid activities, promote foreign investment, and in later years evaluate all major public and private projects for which public funds would be used. The structure would allow close coordination with other Ministries working in the economic field. Finally the Chairman was to be Deputy Prime Minister, with direct chairmanship of the Council of Economic Ministers. Thus the Prime Minister was released for figurehead functions and non-economic affairs. As a result, the Deputy Prime Minister and the Presidential staff (after 1963) were in a direct line of command stretching ultimately far down the economy.

As in all areas of Korean life, although the position of Deputy Prime Minister was organisationally strong, much still depended on the personality of the Minister himself in a country where in the 1950s it was said "every Government ministry was a Government in itself".[8] The mere creation of a streamlined organisation does not ensure that the organisation will function. In recent years the role of Chang Ki-yong, DPM 1964-1967 has come to be stressed. Chang was the first civilian DPM, and was proprietor of one of the leading daily newspapers the Hanguk-ilbo, and it was he who first managed to wield all the powers of EPB in a concerted fashion. Only in this way were the

exchange rate reform, interest rate reform and adoption of a genuine export-led growth strategy, based on economic principles rather than dynamic Governmental pressure, made possible and often only through high handed and controversial action. Only the support of the President in the face of hostility from other ministers and from the President's political party the Democratic Republican Party (DRP) preserved Chang in office during the creation of the Second Economic Development Plan.

Chang strengthened the tradition of staffing the economic ministry with technocrats rather than candidates selected on any other basis than competitive competence. From that date onwards a hierarchy within ministries began to develop in which aspirants for Government service placed the Economic Ministry alongside the Foreign Ministry in the top rank.

The second overlord ministry was the Ministry of Commerce and Industry. Initially its role lay in the strategic importance of foreign trade and industrialisation. In 1962 apart from the Ministry of Justice and the Ministry of Education, the Ministry of Commerce and Industry was the smallest ministry with only 233 employees, compared with 607 in the Ministry of Agriculture and no less than 1,485 in the Ministry of Transport.[9] By 1974 the number had grown to 373, at the same time as the Economic Planning Board had shrunk from 1,136, when first formed, to 375.

As the years went by and the promotion of industry and trade became more important, not only did the number of bureaus increase, and ultimately entire ministries such as the Ministry of Energy and Resources develop from MCI, but also an increasing number of quasi-Government organisations directly responsible to MCI came into being dealing with both trade and industry. Some of these organisations are considered in greater detail in subsequent sections.[10] An idea of the increase in detailed control is given by the growth of bureaus within MCI.

Since the emphasis of the Government was on construction, a new ministry was created in 1963 called the Ministry of Construction. This was to be responsible for national physical planning, construction of all infrastructure (except railways), including industrial estates, cities, housing, roads, expressways, and ports. In view of the high amount of investment allocated to infrastructure the ministry rapidly became one of the leading agents in development.

Table 3.1 Bureaus within MCI

1964	1968	1980	1982
Commerce	Commerce	Trade	Trade and Commerce
Mining	Mining	International Trade	International Trade
Power	Power	Promotion	Promotion
First Industry	First Industry	Marketing and Prices	Basic Industry
Second Industry Consumer	Second Industry	Import Policy	Textiles and
	Small and Medium Industry	Steel and Metal Industry	Goods Industry
		Machinery Industry	Machinery Industry
		Electronics and Appliances	Electronics and Appliances
		Chemical Industry	Medium Industry
		Textile Industry	Office of Planning and Management
		Defence Industry	
		Small and Medium Industry	
		Industrial Estates	

Source: Korea Annuals 1964, 1968, 1980 and 1982.

1.3 The implementation of Government policy

The evolution of successive plans and the development experience have been considered in the previous Chapter. Here emphasis is on the methods by which the Government implemented its plans. Jones and SaKong's recent survey of implementation considers that "... Koreans are even better at implementation than at planning."[11] Jones and SaKong argue that the Republic of Korea is a "hard" state, the opposite of Myrdal's "soft" state in which "policies decided on are often not enforced, if they are enacted at all, and ... authorities, even when framing policies, are reluctant to place obligations on people. ... More specifically, it is implied that policies should not require compulsion, and this is often held to be a fundamental difference from the practice in communist countries."[12] Myrdal concludes "our investigation has convinced us that success in planning for development requires a readiness to place obligations on people in all social strata to a much greater extent than is now done in any of the South Asian countries. It requires in addition rigorous enforcement of obligations, in which compulsion plays a strategic role."[13]

There can be little doubt that the Republic of Korea is such a "hard" state. At the same time there are clear limits to this "hardness". Jones and SaKong in their entrepreneurship questionnaire produce interesting evidence to suggest that under Syngman Rhee, the Republic of Korea was a soft state.[14] Before going into further detail it is important to take up a point made by Myrdal which is not cited by Jones and SaKong, this is that "even an authoritarian regime cannot record major achievement unless it can somehow mobilise acceptance, participation and cooperation amongst the people."[15] This comes back to the question of the national consensus for development created in the 1960s discussed in Chapter I. Park's measures could not have been as successful as they were, had he not been working in a favourable environment.[16] SaKong and Jones divide their discussion of implementation according to two criteria, intervention mechanisms divided into "instruments of intervention (taxes, exchange rates, rationing, subsidies and so on)" and "the kinds of pressures brought to bear on individual behaviour". Second the behavioural compliance mechanisms may be divded into field manipulation instruments and command. Field manipulations and commands may be discretionary and non-discretionary.

"In theory non-discretional field manipulation is the preferred form of intervention, since it achieves a desired deviation from pure market behaviour while taking maximum advantage of motivational and informational advantages of the invisible hand. In Korean practice, it is not so pervasive as one would gather from the writings of some economists".[17]

Jones and SaKong do not allocate weighting to these various categories, and indeed it would be impossible to do so. While analytically useful, these distinctions are often blurred in practice. The obvious and most important case is the supply of credit. There can be no questioning the statement that "under the Park regime, allocation of under-priced credit has been far the most important single instrument of Government micro-economic control".[18]

Some supplies of cheap credit were entirely non-discretionary, as for instance credit advanced on letters of credit, and at the other end of the spectrum, cheap credit was sometimes used as the carrot while formal directives formed the stick. Thus it may be correct to categorise the supply of credit as primarily within the field of discretionary field manipulation, but it also fell within non-discretionary field manipulation and discretionary command. Cheap credit may initially have been supplied under discretionary

field manipulation, but the threat of loss of cheap credit becomes discretionary formal command.

Likewise in the 1972 Law for Inducing Business Corporations to go Public was certainly a formal command when first introduced, and implemented in a very discretionary fashion including threats of loss of credit, but if a law remains active on the statute book, then it surely ceases to be discretionary and becomes part of non-discretionary field manipulation, since under most regimes the framework of law and order must set the field for all economic activity.[19]

The fact is that, since no LDC government thinks in terms of such analytic categories, any "hard" state will slide across from one analytical category to another as it sees fit. Doing business in the Republic of Korea could therefore be likened to playing a game in which one player, the Government, makes up the rules as it goes along. When the game (called "making a profit" according to business, and "national development" according to the Government) appeared to be going well, the Government was happy to keep direct manipulation to a minimum. It is held that between 1965 and 1971 was one such period, although as will be shown, there was continual intervention even in this period. When the game appeared to be going badly the Government intervened in every way it could think of.

It will be remembered that growth rates were highly uneven from year to year, (see figure 1.1). In years of high growth, the Government was trying desperately to cope with the problems of overheating, in years of low growth the Government was trying to ensure a high growth rate the next year. No study has been conducted to measure the degree to which goverment intervention actually created the instability it sought to correct, but the hypothesis cannot be excluded.

In retrospect the Republic of Korea's achievement appears highly satisfactory, and smoothed into five year averages relatively even. In fact the Government often acted as though it was never sure whether growth would continue from one quarter to the next. In this respect both the extent of the Government's ability to reach all parts of the economy, and the rapid reporting of data worked against the Republic of Korea. The Republic of Korea is one of the most rapidly reporting countries in the world. Monthly statistics were available to the President at his monthly economic briefing which an English Prime Minister might have to wait two or three months to know.

This allowed rapid and informed decisions to be made. At the same time it created concern and false alarms. There can be no doubt that much Government activity was a psychological paliative intended to assure the President that action was being taken. Hence policies announced in the press were frequently never implemented. However from the point of view of business, the non-implementation of announced policies could not be relied upon, leading to an indefinite period of uncertainty in the businesses affected. The delay between announcement and potential implementation meant that a period of intensive lobbying was possible in which businessmen sought to modify adverse decisions.

There is an interesting inconsistency in the findings of Jones and SaKong about Government intervention. They found that only 21.8 per cent of respondees thought Government policies might sometimes be avoided, compared with 96.8 per cent under Rhee's Government in the 1950s, but that 71.2 per cent of businessmen in another to another question believed it was sometimes possible to affect Government policies affecting their business.[20] Of course if the Government was determined to enact a policy it could always do so, but in the evolution of that policy from inception to implementation, business was closely involved and policies were frequently modified between announcement and implementation.

The important qualification to note was that the influence of business was frequently via an informal and unofficial network. The fundamental ideology of the civil service was that "civilians" should not influence policy, and the civil service was superior, tapping into a five hundred year heritage.[21] Hence the formal framework put great emphasis on Government decisions, and it was possible for the Government to make and implement decisions which brought business to a halt. This was true on a national scale in 1962-3 when business gave up trying to follow the rapid change of rules, a second example was the August 3 measure of 1972, a third, some of the attempts to reorganise the industrial structure by <u>fiat</u> in 1980. It was even more true of foreign enterprise which had negligible access to the informal structure. One major Hong Kong based trading concern has established a branch four times in the past 19 years only to discontinue three times. Likewise since 1980 small number of very important foreign investors have closed down their operations from a mixture of economic and protest reasons against unfavourable changes in policy.

Although data is difficult to quantify, it appears that the Government has operated a much "harder" state since 1980 than between 1963 and 1979, with the informal structure playing a significantly smaller part in policy decision making.[22] These changes give greater emphasis to the structure which existed between 1963 and 1979. Nevertheless there is a certain irony in the adoption of a declared policy of allowing market forces more play in the Korean economy and reducing Government regulation, while increasing central direction with less consultation. The central direction is all the firmer because if is backed up by theoretical assumptions about the economy, rather than the pragmatism which pervaded the economy under Park. This change is important because it is backed up by theoretical assumptions about the economy, rather than the pragmatism which pervaded the economy under Park. This change is important because under the Park regime it was possible to appeal to the immediate consequences. The essence of recent decisions is that whatever the immediate consequences, the decision must be correct because it is accorded with neoclassical economic theory which must, by definition, produce the best results in the long term.[23]

Jones and SaKong's conclusions is that "effective implementation via hardness has been a major causal factor in achieving the Republic of Korea's phenomenal rate of economic growth from 1961 to 1975".[24] Before deriving rules and lessons for other countries, it is important to remember that an inappropriate policy enforced through "hardness" will have a negative effect. The question is therefore how the Government got its decisions right?

In order to answer this question it is necessary to ask the further questions: "Who is the Government in the Republic of Korea?" "How are policy decisions reached within the Government? And who implements the decisions?" It will be argued that between 1963 and 1979 decision making was surprisingly decentralised through both a high degree of autonomy granted to lower ranking officials, and through the growth of quasi-Governmental organisations. These organisations could be viewed as Government organisations (by the Government) and for certain purposes as private economic associations. Hence Government reached far down to the level of ordinary business, while private enterprise could reach far up ministerial decisions.

It will be obvious that such a system could have led merely to a high level of corruption and inefficiency. That it did not (as it had under Synghman Rhee) was largely the result of vigilance at the highest levels of

Government. Both President Park and President Chon on coming into Office have seen the purge of corrupt officials as a prime task. In 1963 an independent watchdog organisation, the Board of Audit and Inspection was created, which might descend on any Government or quasi-Governmental organisation without warning and conduct a fine toothcomb inquiry into both financial and other activiies. Even so in 1976, 51,468 corrupt officials were punished for irregularities (or 10 per cent of total Government employees).[25] This only emphasises the fact that only constraint vigilance excludes serious corruption under the Korean system, and the first quality of hardness is a willingness to deal with Government corruption.

The second level of checks was through the Economic Planning Boards. Since EPB controlled the budget at a very high level of detail, it conducted an annual scrutiny of each Ministry's activities. EPB, which recruited some of the most able candidates with a high esprit de corps motivated by a desire to promote national development, therefore acted as an important watchdog judging the level of economic efficiency.

Good decisions depend on good information. In 1958 the the Republic of Korea signed a contract with Surveys and Research Corporation of the United States to study how to improve the quality of statistics in the Republic of Korea. By 1961 the report was complete and the military Government was able to implement some of the suggestions, and moved the Bureau of Statistics from the Home Ministry to E.P.B. The monthly economic briefings to the President required rapid reporting, so that the present system evolved in the early 1960s.

However between 1967 and 1979 there seems to have been little improvement in the types of data collected. Nor, has the number of central Government employees increased, despite the enormous increase in the sophistication of the economy. This means that an increasingly complex economy was being controlled by a static number of ministerial employees. Nor can it be said that average civil servant's abilities to handle sophisticated economic analysis has necessarily increased.

A natural consequence of this has been an increase in the influence of non-Government personnel whether in private enterprise, academia or other areas. It was at this point that the quasi-Governmental organisations became more influential, as the case studies given below suggest. These

organisations reported primarily to the Ministry of Commerce and Industry, and their growth has greatly strengthened the power of MCI vis-à-vis the Economic Planning Board during the period 1969-1980. Nevertheless MCI never attained the all powerful position of MITI in Japan.

The quasi-Governmental organisations offered a formal structure for Government - business interaction. The nature of Korean society allowed a second informal structure. Although often described as an intensely hierarchial society, such a description is misleading if it implies that orders and decisions flow smoothly from top to bottom and not in any other way. Other influences intermingle, family, alumni, "age-set", length of relationship, etc. Since a great deal of autonomy is given to low ranking officials, informal networks between Government officials and businessmen form an essential part of lobbying. The normal form of approaching a stranger is to use a mutual friend to given an introduction. This is normally more efficacious than to be introduced by a superior.[26]

Since elected politicians play such a small role in Korean Government life, the paths of influence and interaction between Government and business are labyrithine.[27] Although cases can be found of the personal intervention of the President and of ministeries, the majority of policies are formed, as in western democracies, through intensive lobbying of decision-makers. In the Republic of Korea however the decision-makers are the 12,000 central Government officials. As in Japan, officials of various ministries also see themselves as representing the interests of their constituents which often leads to interministerial disputes.

During the pre-1980 period these inter-ministerial disputes were often mediated, not by the cabinet, but by the press. Policies were leaked to newspapers to test the reaction of other ministries and other interested groups. This frequently misled foreign businesmen who took the press reports at face value as policies already formulated.

A good example of this complicated interaction can be seen in 1979. In January 1979 a tight money policy and other monetarist principles were adopted. Although announced in January, it was not until April that a well prepared implementation package was ready after four months of intensive lobbying and arguing about exchange rates, interest rates, Government investment policies etc. When the advisibility of using the usual extreme

pressure to achieve the export goal for the year was questioned by EPB at the same time as slowing down investment in the Heavy and Chemical Industry, the proposals received little co-operation from MCI which made direct appeals to the President over the Deputy Prime Minister's head.[28]

Likewise when food imports were liberalised in 1978 to cope with a serious shortage of certain crops, the implementing agency was the Ministry of Agriculture and Fisheries which conceived that any food imports were damaging to the farming interest and used every possible means to delay and prevent the import of the commodities in question. In the event the Ministry of Agriculture proved so recalcitant that the Office of Supply was ordered to step in and import the needed goods directly.

While this was an extreme example it illustrates the ability of a Government agency to defy the rest of the Government.[29] How much more so was this possible in areas less open to public attention. Indeed even within Ministries this sort of obstruction is quite possible in which assistant directors followed their own precepts quite independent of, or opposed to, ministerial pronouncements. When the eye of publicity or of the President was on a particular agency then rapid action could be taken, but in its normal day to day business, the Government was far from monolithic.

This account goes a long way to contradict the initial impression of a "hard" state. If it is accurate where then was the distinctiveness which made the Government of the Republic of Korea such a powerful agent of development? The distinctiveness lies in several different and even contradictory sources.

1) The national consensus that economic development is paramount, beyond the interests of individual companies or power groups. If this creative nationalism were not deeply rooted in the civil service, all the potentially damaging aspects of the system described above would be actualised.

2) The blurring of distinction between civil service and business so that at one moment a civil servant may act as a spokesman for private business and the next a private businessman may become an agent of Government policy.

3) The ability to change the nature of the structure where quick decisions are required, and enforce decisions where a national consensus exists, for instance to raise oil prices immediately and not shelter consumers.

4) Decentralisation of ordinary decision making. The fact that an assistant director can make most decisions without reference to his immediate superior permits rapid decision, preventing administrative delay.

5) The willingness of the Government to intervene whenever it felt national development would be enhanced, without regard for theoretical or ideological points.

Of all the Government measure, there is little dispute that the most effective weapon was credit rationing. As will be seen, the Government was in the unusual position of controlling nearly all the commercial banks through ownership as well as indirect controls through the Bank of Korea and Ministry of Finance. It could perhaps even be argued that the multiplicity of administrative controls were excessive given the power of the Government to control finance. Many of the administrative measures might have been greatly simplified (and could be in a country trying to imitate the Republic of Korea) as long as control of credit remained.

An example both of the foregoing discussion and of the strength of Government control can be seen in the case of the Heavy and Chemical Industry Promotion Council. In Japan a comparable plan had been pushed through by MITI in conjunction with big business from 1958 onwards. In the Republic of Korea such planning lay in the sphere of EPB which was doubtful about its viability and desirability. Therefore a special committee was set up in the Blue House directly under the President which could liase directly with the more enthusiastic Ministry of Commerce and Industry and the Ministry of Construction. Because of its location in the Blue House it was beyond criticism, and partly covered by emergency decrees issued under the Yushin Constitution of 1972 preventing public criticism. This committee could thus bring the strongest pressure to bear on all financial institutions.

Since the schemes were far more expensive than projected, by 1978-79 they were absorbing 82 per cent of industrial investment. The Council was able to use Presidential influence to perfection so that even the Korea Housing Bank, a Government institution solely concerned with building public housing had

lent a considerably sum of money for the purpose of building the Heavy and Chemical Industrial Plant by 1979. Once the plan was underway, the high level of support it received meant that it was not re-evluated after the 1973-74 oil crisis, nor in the light of the obvious development of world wide overcapacity in petrochemicals, shipbuilding and even consumer electronics in the late 1970s.[30] It was only with the change of President in 1979 that it became possible to challenge the whole plan successfully.

The Heavy and Chemical Industry Committee shows how the Korean system could push through a plan which proved unchallengeable even as severe disadvantages emerged, but only by by-passing the existing structure. The system gave the President unlimited power, provided he choose to use it and exert continual pressure. If the policy was handed over to the bureaucratic structure a quite different system came into operation. Since President Park was only interested in results, he did not interfere with the ordinary running of the economy as long as it appeared to be running well.[31]

With the death of President Park in October 1979, all Blue House pressure disappeared, and the bureaucracy took over smoothly. In early January EPB and MCI came to a compromise about interest rate and exchange rate changes, an agreement which had been delayed as long as either side believed it could get Presidential influence to change the policy mix. But on May 31, 1980, a Special Committee for National Security Measures (SCNSM) was set up under the Commander for Defense Security, later to become President. The economic subcommittee of this committee was in the position to enforce decisions afecting the whole economy, just as the Heavy and Chemical Promotion Committee had been able to affect heavy industry.

A stream of major decisions streamed from this subcommittee which radically altered Government-business relation. Mergers and changes in direction of policy destablised the business community, thus arguably prolonging the recession, and leading to a loss of confidence among many businessmen in Government support and resumed growth. Since bolstering business confidence in continued growth was, after providing preferential credit, the most important function of Government from the business point of view this proved serious.

Businessmen were not convinced by the monetarist and neoclassical policies ennunciated by the SCNSM. Korean businessmen were used to a

sympathetic Government that put growth before market forces or correcting theoretical imbalances in the economy, and wanted a healthy home market as well as support or exports. The new Government showed no interest in stimulating the domestic market, although declaring utmost support for exports. Their adoption of a sliding exchange rate helped exports but during the consumer boom of 1976 - early 1979 even firms which had previously concentrated on exports had begun to sell to the domestic market, and the new Government was determined to widen the gap between domestic and export markets just when market forces had pushed them close together than ever before.

During 1981 and 1982 an argument between those who believed the Republic of Korea should wait for the world recovery to produce a second take-off (largely in the Government sector) and those who argued that the domestic market could lead growth (largely businessmen) persisted. By the end of 1982 the delay in world recovery convinced almost all Government officials that reflation of the domestic economy was required, though they still differed as to whether this reflation should be through construction or through consumer spending. However there is a strong case for arguing that the wrong choice of policy mix from 1980-1982 retarded the Korean recovery.

2. Quasi-Government agencies

Of the many quasi-Government agencies selected for consideration to illustrate the argument used above, three have been chosen. As part of the restructuring of the economy in 1961 the Government ordered all incorporated businesses to join business associations. This was set out in the Business Association Act of 1961. Further associations were created later in the 1960s, often to incorporate smaller groups of associations, for instance KOFOTI (Korean Federation of Textile Industries) was established in 1967 to pull together the various associations representing branches of the industry.[32]

2.1 Korea Trade Promotion Corporation (KOTRA)

KOTRA was founded in 1962 as part of the Government export drive. KOTRA has been an extremely important instrument in the early development of exporting activities. KOTRA representatives, liasing closely with embassy and consular officials, travelled round the world exploring the developing markets for existing products. At the same time they advised Korean manufacturers on

products which could be developed. In this process they were greatly helped by the existing overcapacity in the textile and other industries in the early 1960s.

KOTRA provided training for Korean salesmen, instructing them of how to present samples, giving advice on foreign import laws and assisting with both legal and financial aspects of trade. In many ways it resembles JETRO in Japan which predates it. The important distinction, a senior KOTRA Official insisted, is that KOTRA is a Government agency, whereas JETRO is privately funded and independent. Nevertheless it is admitted that in the early days much was learned from studying JETRO. In fact this merely illustrates the ignorance in contemporary Korea about Japanese organisation. JETRO has since 1958 been a public corporation with all of its capital coming from central Government. Virtually all of JETROs overseas personnel are MITI transferees.[33] In this respect KOTRA may be more independent of MCI.

KOTRA has a close relationship with the Korea Traders Association. In 1966 KTA took over the Korea Commercial Arbitration Board which deals with disputes arising from international trade. It was KOTRA which organised the first international trade fair in the Republic of Korea in 1968, but KTA Now administers the Korea Exhibition Center, although recently it has been proposed that KOEX should be transferred back to KOTRA.[34] KOTRA's office in New York has been in the KTA owned Korea Center since 1974 along with other Government agencies, while KOTRA's headquarters in Seoul is in the World Trade Center along with KTA, KOFOTI and a number of other quasi-Government agencies.

KOTRA now maintains 86 Korea Trade Centers throughout the world (as against 4 of KTA). The first was opened in New York in 1964, and by 1968 there were already 25 branches. KOTRA is charged with monitoring all tariff and non-tariff barriers on Korean goods on a month to month basis and advises the relevant businesses of their application. This includes an early warning system on goods which may soon become subject to trade barriers. This wealth of information is available to MCI and when the latter wishes to modify trade policy, KOTRA advises information on the overseas impact of policies. Thus information policies ideas often originate in KOTRA and are channelled either to MCI or to private industry as appropriate.

KOTRA deserves a thorough study of its evolution through the years. It has already attracted attention from developing countries. In recent years

officials from Egypt, Haiti and Thailand have visited and studied KOTRA. The organisation's role has clearly changed greatly in the 1970s. Large Korean companies in the chaebul class now have their own world wide information network, but KOTRA remains the best network of information for both Government and small and medium companies. It also provides an important matching service for foreign importers seeking advice on Korean manufacturers.

2.2 Korea Traders Association (KTA)

Whereas KOTRA is an acknowledged Government agency directly responsible to MCI, KTA is officially the representative voice of private industry concerned with exports. Indeed it was founded as a purely private organisation in 1946 with just over 100 companies. It was too important an organisation in view of the Government's development strategy to be left in private hands and since 1961 personnel have flowed easily from MCI to KTA and vice versa. Before the present Chairman took office he had been successively governor of the Bank of Korea, MCI Minister and Deputy Prime Minister. The long standing Chairman 1973-1980, Park Chong-hoon formerly a Major General in the Air Force was MCI minister in 1963, and 64-67, then becoming DPM 1967-69.

In 1969 KTA was reorganised and greatly strengthened, being given the right to collect .55 per cent of c.i.f. value of all imports. In return it was to provide the funding for KOTRA, and to rapidly develop its presentation abroad.[35] This levy was to be reduced and phased out altogether by 1986 when KTA would have built up sufficient funds. Through the Korea Traders Scholarship Foundation is also provided substantial sums of money, including 1 million dollars to Harvard University.[36]

Naturally the ability to collect such large amounts of money gave the Traders Association enormous power, and enabled it to provide for its members, numbering about 3000 by 1981, extensive services in terms of information, expertise, insurance and arbitration. It handles world wide publicity, puts buyers and sellers in touch and has run the Korea Exhibition Center since 1979. It also sponsors various bilateral economic councils, of which the first, the Korea-Japan Economic Committee was established in 1969.

On behalf of its members KTA organises meetings of member companies to discuss mutual problems and then makes appropriate recommendations to MCI or other agencies. In 1974 for instance it made 167 formal suggestions of which

76 per cent were reported adopted.[37] 1974 was an exceptional year in which the Government was soliciting ideas to increase exports after the oil price increase of 1973, and the number of suggestions is not thought to have been so large in recent years. On behalf of the Government, KTA was empowered to issue trade related certificates, import/export licenses, trade performance certificates and other functions. In 1980 KTA provided subsidies of W30 thousand million (46 million US dollars).

Most people even in the Republic of Korea would be inclined to regard KTA as a private organisation. Officially it is a "non-profit, voluntary organisation", but the head is vetted by MCI and during the 1981-82 drive to cut the number of civil servants, the quota of cuts for MCI and related agencies included cuts ordered in KTA.[38] There is a case for regarding KTA as an independent organisation but it is very closely related to the Government. Its budget comes from a Government authorised levy on trade amounting to 100 million dollars per annum, described by one very senior Government official as "all Government money anyway" and often spent at the direction of the central administration.

The Government clearly regards it administratively as part of the Government. However in representing the views of its consituents it acts as a voice of private enterprise. As Jones and SaKong point out "there is a crucial discontinuity between Government and private planning, and crossing this interface is the critical bottleneck in implementation".[39] Organisations which straddle the divide between Government and business clearly bridge that interface and have proved important in ensuring the Government gets good advice and that Government plans are implemented in private businesses.

2.3 Korea Society for the Promotion of the Machine Industry (KOSAMI)

KOSAMI is an example of industry associations, of which two more will be considered in the sectoral studies. The associations founded in 1961 and 1962 were useful organisations at the 4 digit level of classification and formed intermediaries between MCI and individual firms. However as interest in strategic industries grew, groupings which covered all industries within a three digit classification were called for. KOFOTI to cover all textiles was formed in 1967, and KOSAMI in 1968. In 1967-68 it was decided to promote

"strategic industries" and in the first half of 1968 to provide "maximum administrative (author's italics) and financial support" for the manufacture of 68 machinery items designated to replace imports and 18 categories of the machinery industry.[40] Credit on the scale of 1 thousand million won (3.5 million dollars) in commercial loans was made available for firms buying Korean machinery and a similar amount in Treasury loans for firms investing in the required sectors, alongside US$ 10 million in long term low interest loans for necessary imports.

To administer this plan, KOSAMI was created as "the specialised association of mechanical engineering manufacturers, representing the Korean engineering industry as a whole". By 1982 this organisation had 19 associations of manufacturers formed under the 1961 legislation and a number of individual members. Preserving the face of a private association it was funded through the contributions of members and not by Government.

However its role as a Government agency was clearly indicated in 1981-82 when MCI ordered it to reduce its staff, and it was subjected to an audit by the Board of Audit and Inspection. It was also delegated various functions by MCI including designing industrial policy. The official literature states that KOSAMI, "promotes the mutual economic interest of the mechanical engineering industry in public and particularly in dealing with public authorities and other sectors of commerce and industry. KOSAMI is primarily active in the field of economic policy and where advice and exchange of experience will contribute towards improving the mechanical and engineering industry's productivity".[41]

It administers the Machinery Industry Promotion Fund, and provides warranties for domestic machinery purchased with this fund which is intended to encourage Korean firms to buy Korean. It also researches into the efficacy of various policies including those intended to upgrade Korean machines through technical guidance and through R and D. Although originally conceived as primarily an import substitution agent, KOSAMI provides an export service in terms of providing product information, organisation, the circulation of notices of overseas tenders and assessing the areas in which Korean industry should develop export capacity. Since 1977 it has also organised Korean machinery fairs, Table 3.2 lists the major accomplishments since its foundation.

In suggesting policy to MCI, KOSAMI acts as an interface for the industries it represents, and as an administrative arm of MCI in other areas. As the economy became more complicated the advice of KOSAMI became more essential but at the same time the ability of the member firms to initiate policy formally also increased.

2.4 Other organisations

These three organisations may be taken as representative examples of quasi-Government organisations within the industrial sector. Such associations, sometimes called co-operatives exist in every sector of the economy through agriculture, fishing, mining, manufacturing and many service sectors. They were almost all Government initiated, but now have an independent life of their own. The smaller organisations also have a Government role. Not only KOSAMI, but member organisations such as the Korea Electric Association, the Korea Sewing Machine Association, the Korea Regrigeration and Air Conditioning Association and the Korea Automobile Cooperative have delegated responsibilities including deciding on permits for imports of items on the restricted list.[42]

Each Ministry also has an associated research institute which also assists in the formulation of policy. The advantage of the research institutes was that they were free from the very rigid constraints on pay prevalent in the civil service. The salaries for civil servants at all levels remains extremely low. In the past competition for places was extreme, perhaps a hundred candidates for one place. Recently both the number of applicants and more important their quality has deteriorated. The Korean system has depended on attracting to the civil service recruits who were both of very high ability and highly motivated towards public service. It appears that this is no longer possible and very serious consequences could result from the system being perpetuated with inferior quality staff with lower motivation.[43]

3. Financial Structure

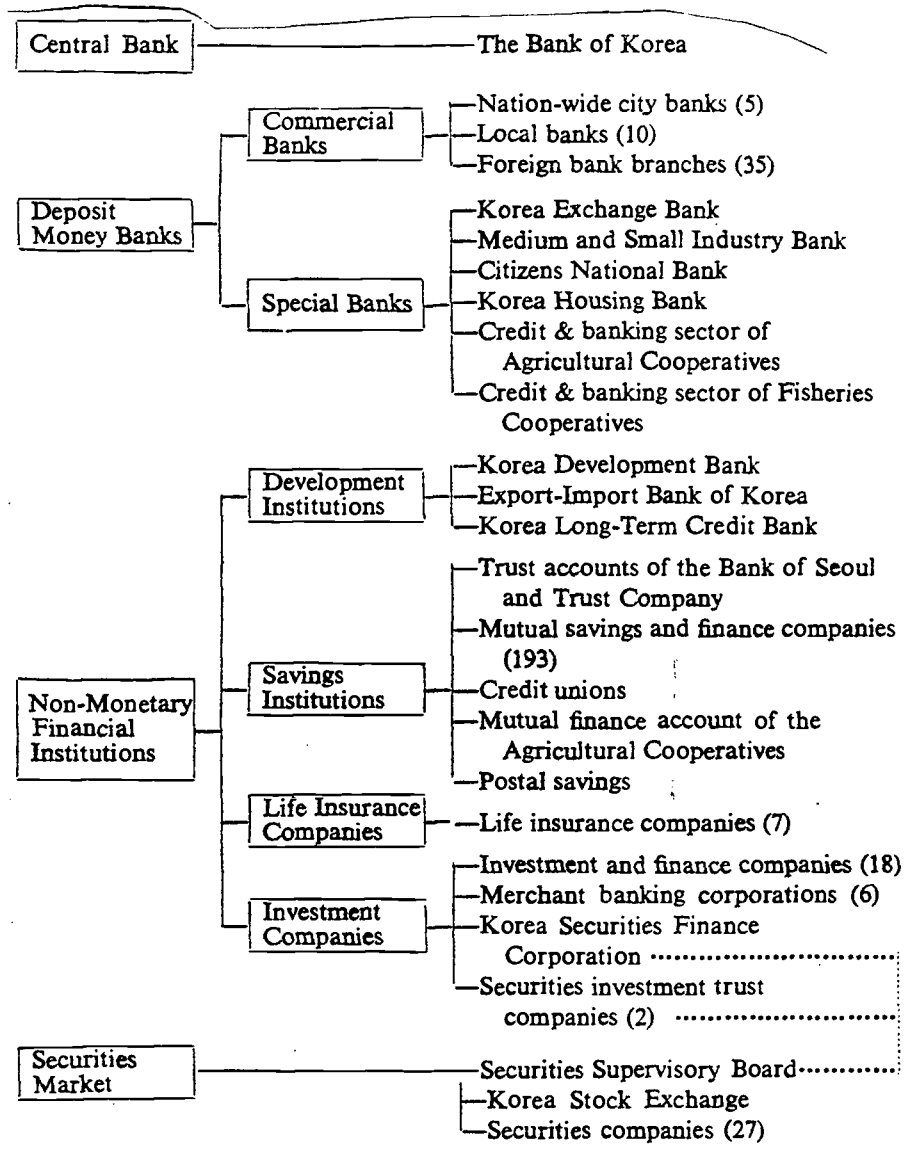
If credit control was the major instrument of implementation, how was it administered? Figure 3.3 sets out the financial system of the Republic of Korea, while Table 3.3 gives the proportionate holdings of the various financial institutions. First it should be noted that with the exception of the local banks, the foreign bank branches, the life insurance companies and

Table 3.2 Major Achievements of KOSAMI

- Key Plant Construction Projection for Machinery Industry (1971)
- Research on the Promotion of Machine Tool Production (1972)
- Long Term Machinery Industry Promotion Plan (1973)
- Research on Export Potential of Machinery Products (1973)
- National Machinery Industry Census (1973)
- Research on the Promotion of Machinery Export (1974)
- Research on the Promotion of Auto Parts Industry (1974)
- Diesel Engine Demands and Production Capacity Survey (1974)
- Research on Domestic Production of Shipbuilding Machinery for Ship (1974)
- Feasibility Study on Domestic Production of Key Industrial Plants (1974)
- Survey for Domestic Possible Production Ratios of Imported Plants (1975)
- Research on Tariffs for Machinery Imports (1975)
- Research for Managerial Improvement of Machinery Industry Promotion Fund (1975)
- National Machine Tools Census (1975)
- Research on Localization Posibilities of Industrial Machine (1976)
- Estimation on Demand of Facilities Funds (1976)
- Survey for Selection of Small & Medium size Specialized Machine Firms (1976)
- Publication of Korean Machinery Catalogue in English (1976)
- Establishment & Operation of Export Cooperative Council (1976)
- Mission for Survey of South-East Asia & Middle East Plant Market (1976)
- Invitation of Japanese Machinery Industry Mission for Meeting (1976)
- Construction of KOSAMI Hall (1976)
- '77 Korean Machinery Fair (1977)
- Mission for Survey of East-Asia Machinery Industry Capabilities (1977)
- Contest of Korean Machinery Catalogue (1977)
- Symposium for Fostering Machinery Industry (1977)
- National Meeting of Machinery Industry Circles (1977)
- Mission for Survey of Japanese Machinery Industry Capabilities (1977)
- The 1st Korea-Japan Machinery Industry Cooperation Subcommittee Conference (1977)
- Report on current Capabilities of Korean Machinery Industry and Incentive Measures (1977)
- Research Report for Development of Machinery Industry (1977)
- Survey & Research Report on Master Plan for the Development of Machine Industry (1978)
- Reserach on Plant Export Law (1978)
- The 2nd & 3rd Korea-Japan Machinery Industry Cooperation Subcommittee Conference (1978)
- Seminar on Technology & Quality Control for Promoting Machine Industry (1978)
- Field Survey of Machine Industry Firms (1978)
- The 4th & 5th Joint Conference of Korea-Japan Machinery Industry Cooperation Committees (1979)
- Korea Machinery Trade Fair (1979)
- Machinery Catalogue Display in Tokyo & Singapole (1979)
- Plant Trade Mission to South-East Asia (1979)
- Textile Machinery Trade Mission to South-East Asia (1979)
- Establishment of Textile Machinery Advisory Committee (1979)
- Presentation of Master Plan for the Development of Machine Industry to IBRD (1979)

Source: KOSAMI, KOSAMI, Seoul, 1980, pp. 3-4.

Figure 3.1 The financial system in the Republic of Korea



Source: Rhee Myung-jai: International Banks and Financial Markets in Korea, KIEL, 1981, p. 6.

Note: Figures in parentheses denote the number of institutions.

unit: billion won

	1970		1977		1978		1979		1980		Average Annual Growth Rate (1970-80) (%)	
	Asset	%	Asset	%	Asset	%	Asset	%	Asset	%	Nominal	Real
A. MONETARY INSTITUTIONS	1,869	84.8	14,209	81.8	19,205	80.6	24,711	78.4	33,483	78.6	33.5	11.6
1. Bank of Korea	391	17.7	4,035	23.2	4,859	20.4	5,778	18.3	7,085	16.6	33.6	11.8
2. Deposit Money Banks	1,478	67.0	10,174	58.6	14,346	60.2	18,933	60.0	26,398	62.0	33.4	11.6
(1) Commercial Banks	709	32.2	6,414	36.9	9,092	38.0	11,955	37.9	16,238	38.1	36.8	
1. Nation-wide Commercial Banks	654	29.7	4,988	28.7	7,065	29.6	9,288	29.5	11,938	28.0	33.7	11.8
2. Local Banks	40	1.8	885	5.1	1,177	4.9	1,492	4.7	1,883	4.4	47.0	22.9
3. Foreign Bank Branches	15	0.7	541	3.1	820	3.5	1,165	3.7	2,417	5.7	66.2	38.9
(2) Special Banks	769	34.9	3,760	21.7	5,284	22.2	6,978	22.1	10,160	23.9	29.4	8.3
1. Korea Exchange Bank	346	15.7	1,291	7.4	1,653	6.9	2,163	6.9	3,763	8.8	27.0	6.2
2. Medium and Small Industry Bank	83	3.8	477	2.8	725	3.0	1,037	3.3	1,409	3.3	32.7	11.0
3. Citizens National Bank	88	4.0	594	3.4	871	3.7	1,182	3.7	1,506	3.5	32.8	11.1
4. Korea Housing Bank	35	1.6	173	1.0	343	1.4	771	2.4	1,181	2.8	42.2	18.9
5. Credit Sector of Agricultural Cooperatives	193	8.8	1,096	6.3	1,525	6.4	1,624	5.1	2,039	4.8	26.6	5.9
6. Credit Sector of Fisheries Cooperatives	24	1.1	129	0.7	167	0.7	201	0.7	262	0.6	27.0	6.2
B. NON-BANK FINANCIAL INSTITUTIONS	336	15.2	3,155	18.2	4,635	19.4	6,862	21.6	9,102	21.4	39.1	16.3
1. Development Institutions	211	9.6	1,630	9.4	2,269	9.5	3,226	10.2	4,564	10.7	36.0	13.8
(1) Korea Development Bank	211	9.6	1,449	8.3	2,030	8.5	2,902	9.2	4,008	9.4	34.2	12.3
(2) Korea Export-Import Bank	(1976:) (81)	-	181	1.1	239	1.0	324	1.0	556	1.3	(61.9)	(60.6)
2. Savings Institutions	101	4.6	771	4.4	1,117	4.7	1,631	5.2	1,745	4.1	33.0	11.2
(1) Mutual Savings and Finance Companies	(1973:) (42)	-	130	0.7	218	0.9	360	1.2	533	1.3	(43.8)	(17.6)
(2) Postal Savings	15	0.7	35	0.2	30	0.1	41	0.1	85	0.2	18.9	.0.6
(3) Trust Accounts	86	3.9	606	2.5	869	3.7	1,230	3.9	1,127	2.6	29.3	8.2
3. Life Insurance Companies	24	1.1	214	1.2	355	1.5	699	2.2	1,006	2.4	45.3	21.5
4. Investment Companies	(1976:) (357)	-	540	3.1	894	3.8	1,268	4.0	1,787	4.2	(49.6)	(23.7)
(1) Merchant Banking Corporation	(1976:) (11)	-	69	0.4	209	0.9	337	1.1	575	1.4	(168.9)	(124.6)
(2) Investment and Finance Company	(1972:) (2)	-	471	2.7	685	2.9	931	2.9	1,212	2.8	(122.7)	(82.0)
TOTAL (A+B)	2,205	100	17,364	100	23,840	100	31,535	100	42,585	100	34.5	12.5

Note: 1) KLCB, credit union, Mutual finance a/c, KSFC and Investmen Trust Corporations are not included due to the statistical difficulty.
2) Figures in paretheses represent the first available data for each institutions.
3) GNP deflator (1975 = 100) is used to derive real growth rate of assets.

Source: Monthly Economic Statistics (various issues), the BOK.

merchant banking organisations the Government either owned a share in the commercial institutions, or the institution was a Government body. Hence in 1970 the Government directly controlled 96.4 per cent of financial assets. By 1978 this had shrunk to 84.4 per cent and 82 per cent by 1980.[44] Of the remaining 18 per cent, only the foreign banks were not exposed to direct administrative pressure.

There would be some justification for regarding all the institutions under Government control as being part of the same institution, and in many ways the administrative effect has been just that. Rather the special banks and the development institutions have been given specific functions to perform, though in extreme cases these areas have been broken down as in the case of diverting the funds of the KHB to industry. For administrative ease they have specific target groups and preferential interest rates.

The commercial banks also have their interest rates controlled directly, and most make funds available according to Government order, as in the case cited above, where 10 thousand million won was to be set aside for commercial loans for the machinery industry promotion in 1968. Beyond that the Government could invest directly by buying equity or increasing the capital of special banks, or by authorising the Bank of Korea to issue more currency or give credits to other financial institutions.

One major source of capital lay outside Government control, this was the informal money market or curb market. Highly structured, but outside Government control, its assets at any one time can only be guessed. The Government mounted successive attacks on the curb market to try to capture the funds for economic development, in 1961-62 by fiat, in 1965 through the operation of market forces by raising interest rates, in 1972 by fiat and forcing dealers to register their dealings, and 1982 in the wake of a major financial scandal due to abuses by a major group of curb market dealers. The curb market offered high rates of interest for short-term loans and constituted a well articulated, but complex, informal network which stretched from housewives to businesses.[45]

It was an essential adjunct to the Korean system, allowing small businesses, especially in the tertiary sector, access to capital at a price. What emerged in the 1982 curb market crisis was the extent to which even large industrial firms resorted to the curb market for funds to ease cash flow

problems. The Government controlled network was so closely geared to investment and export credits that any other need could only be satisfied through curb market loans. With expanding markets and inflation, companies could afford to pay the 36-50 per cent interest rates. With collapsing markets and falling inflation the whole structure of company financing was stood on its head, with consequent bankruptcies. Unfortunately the best rates of return were often through speculation especially in the urban property market and the curb market was frequently distorted by the demands of speculators who could easily meet high interest rates when they might double their money in a couple of months.

The relative ease of obtaining loans for new investment by large companies almost certainly retarded the development of the Korean Stock Exchange. Indeed had no stock exchanges existed in other countries no one would have bothered to invent the joint stock company in Korea. The Government has frequently fretted at the failure of the stock exchange to develop, forcing companies with indifferent success to go public, encouraging high dividends regardless of profits, and offering tax incentives.

The struggle to get companies to go public is a fair measure of the inability of the Government to use even its credit sanction to affect a policy which large companies were opposed to. Companies to which assets are transferred to remove them from the public sphere. The failure of the stock market to develop stems from the fact that large companies could get funds cheaper elsewhere and investors acquired an asset that depreciated every year with inflation. Short-term buying and selling was therefore the major activity.[46]

Unlike Japan, the major companies have not owned banks, with the exception of Samsung which owns Dongbank Life Insurance Company. However since 1980 the Government has attempted to sell off its holdings in the commercial banks. Despite stringent measures to prevent the chaebul from buying the shares, almost all the shares sold are believed to have eneded in the hands of chaebul.[47] This will almost certainly lead to a growth of control of financial assets by major companies.

4. Fiscal policies

The Government has normally aimed at a surplus on its current account, but this has become a deficit when special expenditures, investments and loans are taken into account. The problems of assessing Korean Government expenditure were aptly summed up in the World Bank report Growth and Prospects for the Korean Economy, "it is difficult to derive from Government budget data a fully consistent and consolidated picture of public sector finances. One reason is the existence of the extra-budgetary accounts (Grain Management Fund and Fertiliser Fund). Another problem is the complex budget structure, characterised by the existence of a large number of Special Accounts. At present, the central Government budget consists of a General Account, Economic Development Special Account (together termed the General Budget Sector) and 24 other Special Accounts. Characteristic for the system is a large number of transfers between these accounts.[48]

A sceptic would be tempted to conclude that this complicated system with incomplete published data was devised in the 1950s to confuse the IMF and United States Aid donors, and allow large amounts of money to be laundered for other uses. Why it has not been rationalised since is unclear. However in 1977 the structure was simplified effectively reducing the number of special accounts by six.[49]

Most revealing is Table 3.4 which contrasts tax revenue with the overall budget, which shows that about 45 per cent of Government expenditure comes from non-tax sources. Since Government bonds are hardly developed, deficit financing is achieved largely through net borrowings from the Bank of Korea. Since the normal civil and defense expenditure is more than covered by normal revenue, the deficit financing is solely for the purpose of investment and subsidies. After other deficits such as the grain management account and fertiliser account are excluded, approximately all the investment made in the 1970s was achieved through deficit financing. This does not take into account the refinancing and discounting of bills issued by commercial banks and special banks and other financial institutions by the Bank of Korea.

The researches of Norton and Rhee suggest that because of high growth rates and inflation, and because the new money is invested to produce new capacity, the system has only a limited responsibility for inflation. BOK studies suggest that a 10 per cent increase in M2 had only a 2 per cent

influence on prices, lagged over two years. If it is correct that inflation stemmed from other causes, and that the deficit financing was accelerating the Republic of Korea's growth, one has an unfashionable explanation of the growth of the Republic of Korea. This Keynesian view is supported not only theoretically, but by the performance of the manufacturing sector after monetarist policies came into force in 1979.[50] Although the economy has grown since, though at a slower rate, both industrial investment and industrial output have fallen.

To maintain the levels of loans to industry in some other way, the Government would either have to develop a treasury bill market (unlikely, unless long-term expectations about inflation are extremely optimistic) or tax Koreans more heavily. Korean tax policies have been a mixture of a progressive income tax structure in which two thirds of workers normally fall below the initial threshold, but which rises, with defense surcharge to one of the highest rates in the world, and a highly regressive value-added tax levied on nearly every item of consumption for even the poorest citizen.[51]

The situation described above is very different from that prevailing in the early 1960s. At that time the Government was reliant on foreign aid to meet normal expenditure. In 1962 the tax laws were completely revised, and between 1965 and 1968 a reorganisation of tax administration greatly increased the yield, with the rooting out of long standing abuses.[52] The fact that this took so long to implement, despite its obvious necessity, is another measure of the relative autonomy of subordinate bureaucracies. In both 1966 and 1968 tax rates were adjusted to reduce the burden on lower income groups and increase business taxes and income tax for high income earners. On the other hand indirect taxes were raised. These indirect taxes were consolidated when VAT was introduced in 1977, but a number of luxury taxes remained on items which were increasingly no longer luxuries, notably refrigerators.

A breakdown of Government expenditure on the general account in recent years shows that after Defence and General Administration (including public order and safety) and Economic Services Education is the principal item of expenditure. Not included are the large number of private schools and the contributions to all except primary schools by parents. Had the Korean public been less willing to pay for educating their children, the Government expenditure would have had to have been higher on this account. Expenditure on social security and housing is notably low.[53]

Table 3.4 General Iniications of government finance

	國民總生產 (經常) G.N.P. (At current prices)	財政規模 Budget of General Gov't	中央政府[1] Central Gov't	一般會計 General account	其他特別會計 Other special account	地方 Local Gov't	投融資 Investment & loans	國民租稅負擔 Gross public burden for public sector	國稅[2] National taxes	專賣益金 Monopoly profits	地方稅 Local taxes
	I. 金額: 10億원 Amount : In billion won										
1962	355.5	...	119.9	88.4	31.5	...	27.2	37.7	28.2	4.2	5.2
1963	502.9	...	111.0	72.8	38.2	...	27.3	43.3	31.1	4.8	7.4
1964	716.3	...	120.7	75.2	45.5	...	23.8	50.8	37.4	4.5	8.8
1965	805.7	...	164.1	93.5	60.6	...	29.5	69.6	54.6	3.6	11.4
1966	1 037.0	...	231.0	140.9	90.0	...	62.6	111.2	87.6	7.5	16.1
1967	1 281.2	...	291.3	180.9	110.3	...	79.0	153.3	129.2	10.0	14.1
1968	1 652.9	460.0	403.4	262.7	140.7	56.6	117.6	230.0	194.3	16.4	19.4
1969	2 155.3	662.9	579.6	362.7	217.0	88.3	175.6	313.7	262.8	24.3	26.6
1970	2 684.0	696.8	599.0	428.0	171.0	97.7	184.3	401.1	337.8	30.1	33.2
1971	3 294.8	860.3	735.8	516.1	219.7	124.5	213.3	496.3	411.1	45.4	39.8
1972	4 028.9	1 112.2	966.4	696.3	270.1	145.8	309.8	527.3	437.8	42.9	46.6
1973	5 238.3	1 146.7	960.2	655.4	304.8	186.4	250.6	658.7	527.7	57.0	74.0
1974	7 332.5	1 707.8	1 428.3	1 013.9	414.4	279.6	394.6	1 030.2	853.3	69.0	107.9
1975	9 792.9	2 480.1	2 123.6	1 535.3	588.3	356.5	677.6	1 563.2	1 268.9	135.5	158.8
1976	13 272.6	3 362.6	2 895.2	2 142.2	753.0	467.3	871.0	2 333.1	1 934.5	178.0	220.6
1977	17 021.4	4 424.5	3 717.8	2 739.9	977.8	706.7	1 022.7	2 987.8	2 431.2	220.0	336.6
1978	22 917.6	6 057.8	4 755.3	3 538.7	1 216.7	1 302.5	1 244.6	4 137.9	3 414.7	280.0	443.3
1979	29 072.1	8 564.5	6 466.5	5 053.2	1 413.3	2 098.0	2 138.3	5 424.1	4 464.9	360.0	599.2
1980	34 321.6	10 972.6	8 647.8	6 486.1	2 161.8	2 324.8	2 560.4	6 645.1	5 367.4	510.0	767.7
1981 3)	43 155.3	14 534.4	11 386.8	8 040.0	3 346.8	3 147.6	3 583.0	8 247.2	6 645.2	680.0	921.9

Source : Ministry of Finance, Economic Planning Board.
Note : 1) 1962 - 1967 General Gov't Sector and Other Special A/C (Summary of Financial Statistics for Fy 1968)
2) Includes social security tax since 1970.
3) Budget

Source: EPB: Major Statistics of the Korean Economy, 1982, 1983, p. 175.

The Republic of Korea has been fortunate during its period of rapid growth that despite the critical military situation and the need to support the world's sixth largest army, it has been greatly assisted by United States aid.[54] Had the United States support not existed, the Republic of Korea would, of necessity, have had to raise taxes, and or divert funding from economic development to military expenditure. In either case development would have been retarded. On the other hand few developing countries face the same level of direct military threat. Government fiscal policy has been assisted both by the willingness to pay for private education and the low public demand for social services. A change in either would have required more public funds into areas which would not directly assist "blind economic growth".[55]

5. Conclusions

Jones and SaKong, after arguing that effective implementation via hardness has been a major factor in growth, admit that "the possible costs of the hard development model include negative effects on income ditribution, concentration of economic power and civil liberties".[56] It has been argued above that the Korean development model is not as hard as Jones and SaKong suggest. This is largely because of the general consensus about priorities which did not necessitate hardness, but also because in areas of implementation which involved hundreds of civil servants and hundreds of businessmen it is impossible for continuous hardness to be exerted. In direct dealings between the top directors of banks and leading businessmen it can be much more effective. Not mentioned above, but also important despite the small size of the country, is the fact that Government hardness also softens with distance from the capital.

These qualifications make disentangling the precise contribution of Government to Korean development much less easy. There are analogies here with the debate over the causes of Japanese success.[57] The essential features appear to be:

1. Leadership in the sense of setting clear national priorities, and keeping economic development as the first priority, and holding together the elements in Korean society which cohere much less easily than in Japan; business, Government, labour, public opinion etc. Successive Korean leaders have felt that democracy in a western sense would make this task less easy and have correspondingly placed civil liberties lower than economic development.

It is hard to argue that this has increased the national consensus, or that leaders have always been able to distinguish between economic development and their own continuation in power.[58]

2. Forward planning in the sense of smoothing the path for business to follow, including providing finance, superstructure and often direction.

3. Controlling the financial system very tightly so that little money is wasted on conspicuous consumption, and encouraging a frugal attitude amongst the rich both in public and as far as possible in private, and directing finance into industrial development. This has almost inevitably led either a concentration of economic power in the hands of the state or large corporations, a subject to be discussed in the next section.

4. An excess of regulations and bureaucratic interference to no purpose. This has been moderated by the informal networks diverting potential damaging policies and blunting others in particular cases. Nevertheless mistakes have still been enforced, and undoubtedly a simpler attitude to regulations, a clear demarcation of responsibilities and an ability to leave well enough alone including reducing the number of forms and paperwork required for many types of economic activity are called for. This, the Fifth Plan declares will begin during the present plan period. The most useful contribution in the past has been the Government campaign to keep the number of civil servants down so that they have been too busy to do more than rubber stamp most regulations, and thus reduce administrative procedures.

From the point of view of lessons for other countries, the creation of consensus if it does not exist might be best achieved through extending democracy away from the existing elite to those who have most to gain from economic development, the ordinary people, coupled with planning and financial measures based on simplified versions of Korean procedures.

6. Enterprises

6.1 Introduction

The Republic of Korea is unusual in undergoing a rapid change in business structure as it developed. To a degree this has been a result of deliberate policy. In the early 1960s the Republic of Korea began its period of rapid development relying on indigenous companies. In this process big business,

defined as establishments employing more than 300 employees, played an important role. In the early 1960s these enterprise produced less than half of the Republic of Korea's industrial output, but 77 per cent of the Republic of Korea's exports.

Between 1965 and 1973 foreign investors played an increasing role, mainly through joint ventures, but also through wholly owned subsidaries. But from 1973 onwards, partly assisted by the Heavy and Chemical Industry Plan, large Korean companies, the chaebul, grew rapidly, and foreign investment became less and less important. By 1980 the Republic of Korea had more companies in Fortune's list of the top 500 non-United States companies than any country except the United Kingdom, the Federal Republic of Germany, France, Japan, Switzerland, Sweden and the Netherlands. The Republic of Korea's success in holding multi-nationals at bay (if this is conceived as desirable) or at least in creating world class companies is remarkable, and while controversial inside the Republic of Korea, offers hope for future growth in the 1980s.

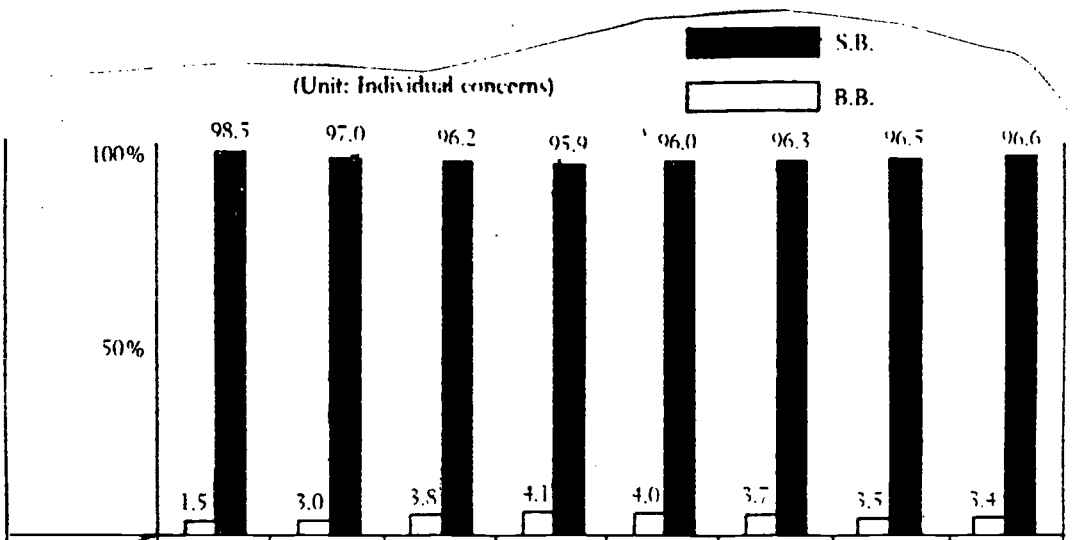
6.2 Enterprises and companies

There is a fundamental problem in studying Korean enterprises in that almost all publicly available data is based on the industrial establishment, not the enterprise.[59] In many cases great care is taken to avoid the identification of particular enterprises.[60] As a result statistics tend to present the fiction that each manufacturing establishment is a separately and independently owned enterprise. Thus for example the Korean Federation of Small Business produces the following figures to illustrate the division between small and medium business and "big business". (figure 3.2).

For many purposes this distinction is not important. However in assessing ownership patterns beyond the 45 chaebul, even within the 500 members of the Federation of Korean Industry to which all large Korean companies belong is almost impossible except by starting at firm level. Appendix Table 10 lists the division between joint stock comapnies, other corporations and those owned by individuals. Of the 6,052 manufacturing joint stock companies, less than 356 are public companies quoted on the Korea Stock Exchange.[61]

In part of the account that follows the fiction that each manufacturing establishment is a separate firm is preserved faute de mieux. Table 3.5 shows

Figure 3.2 Small and medium business compared with big business.



% Year	1963	1970	1975	1976	1977	1978	1979	1980
No. of All Enterprises	19,550	25,816	24,229	26,564	28,292	31,701	33,628	32,557
No. of Small Business	19,253	25,037	23,304	25,487	27,156	30,518	32,459	31,465
No. of Big Business	297	779	925	1,077	1,136	1,183	1,169	1,092

Source: Small and Medium Business Federation: Small and Medium Business in Korea, Seoul, 1981

Table 3.5 Manufacturing establishments

Year	Number	Employees	Average Size	Employees inc under 5
1955	8,628	221,200	25.6	
1958	12,971	260,427	20	
1960	15,204	275,254	18.1	436,000
1963	18,310	491,981	21.9	631,000
1966	22,718	566,665	25	833,000
1967	23,833	648,811	27.2	1,021,000
1968	24,109	748,307	31	1,170,000
1969	25,098	828,966	34	1,232,000
1970	24,114	861,041	36	1,284,000
1971	23,412	848,194	37	1,336,000
1972	23,729	973,415	41	1,445,000
1973	23,293	1,157,829	49	1,774,000
1974	22,832	1,298,384	57	2,012,000
1975	22,787	1,420,144	62	2,205,000
1976	24,957	1,717,308	69	2,678,000
1977	26,726	1,918,931	72	2,798,000
1978	29,864	2,111,925	75	3,016,000
1979	31,791	2,189,000	69	3,126,000
1980	30,720	2,089,000	68	2,972,000
1981	32,560	2,210,962	68	

Source: EPB, Surveys and Censuses of Mining and Manufacturing (various dates).

the number of manufacturing establishments, the number of employees and the average size. Excluded are manufacturing workers in establishments employing fewer than five persons. Bai Moo-gi has argued that establishments employing 10 or fewer employees should be regarded as belonging to the traditional sector.[61] In his analysis he fails to include figures for workers in establishments with fewer than five employees. Hence in 1960 he finds 8,426 enterprises in this category and 14 per cent of industrial workers in the premodern sector. However including all industrial workers, 37 per cent belonged to the traditional sector.

If big business was responsible for 70 per cent of manufactured exports in the early 1960s then in 1963, just over 300 establishments were responsible for the Republic of Korea's take-off, in as far as it depended on the export of manufactures. It could be argued that these select enterprises were those rebuilt after the Korean war with the latest machinery, which comprised a small modern industrial sector which was the leading edge of the Republic of Korea's development. Could this be taken as confirmation of Milton Friedman's contention that "he knows of a sure formula for promoting rapid growth. Destroy the greater part of a nation's fixed capital in war activity and dislocate the whole economic structure. Eventual recovery from this chaotic state of affairs will be rapid, giving a growth rate of 8-10 per cent annually".[63]

Unfortunately, as pointed out in Chapter II, section 2, early Korean growth was not dependent on exports, and throughout the growth process, the traditional sector has proved remarkably vital. After a slight decline from 37 per cent to 32 per cent, the share remained at 30 per cent even in 1978.[64] However the share of establishments employing between 5 and 10 employees shrank to 3.3 per cent. The size of the very small traditional sector requires further study, and is best treated under the labour market heading.[65]

The slow growth of the number of industrial establishments is a second feature of Korean development. Although between 1961 and 1978 industrial output rose 27 times, the number of establishments rose by 96 per cent, while as Table 3.6 shows, all this increase occurred before 1966 or after 1975. Between 1966 and 1969 the growth of establishments fell by nearly 3,000. In 1971 even the number of workers fell. Reference to Table 2.6 shows that in 1970 the annual rate of growth fell from 13.8 per cent to 7.6 per cent, and in 1972 domestic sources of growth were negative.

Although the economy weathered the crisis, a large number of enterprises were caught in a prolonged period of business uncertainty. This coincided with a high level of labour unrest, the response of the Government to both push heavy and chemical industries and accelerated rural development. Unlike the recession of 1979-81, the average size of firm increased rapidly during this period, from 34 in 1969 to 62 in 1975.

In the recession of 1979-81 however not only did the number of establishments fall, but also the average size of establishment fell from 75 in 1978 to 68 in 1980. This fall can certainly partly be ascribed to an increased awareness of the need for labour productivity to increase to reduce costs during the recession.

At the present stage of knowledge it is impossible to prove a causal connection between Government policy and the aggregate size of establishment and number of companies. However it appears that between 1960 and 1969 the trend of development encouraged the expansion of existing firms and expansion of scale. Between 1976 and 1979 both new enterprises and an increase in establishment size were encouraged.

Table 3.6 Establishment survival rate

Date of foundation of establishments	Still existing 1976	Still existing 1978	Still existing 1979	Percentage of establishments closed by 1976
- 1945	565	552	487	
1946-1950	487	390	439	
1951-1955	717	633	614	6,859 (79%)
1956-1960	1,302	1,021	1,006	12,133 (80%)
1961-1965	2,446	1,814	1,740	12,879 (70%)
1966-1970	5,536	4,368	4,020	13,061 (54%)
1971-1975	12,478	10,310	9,701	5,928 (26%)

Source: EPB Census of Manufacturing (various years)

The figures reproduced above are net rates, after new firms and failed firms have been cancelled out. Figures for business failure are not available in the Republic of Korea. Table 3.7 shows corporate entry and exit between 1966 and 1969.

This shows a very high failure rate of corporate enterprises between 1966 and 1969 of approximately 25 per cent per annum, a number only just matched by new entrants. Jones and SaKong also suggest that during 1975, 12.9 per cent of enterpriese failed.[66] 1975 was not the best year for business, but table 3.7 which is based on establishments, not enterprises, suggests that 54 per cent of establishments founded between 1966 and 1970 had ceased operations by 1975. Forty-seven per cent of firms founded in 1971 were defunct by 1975, and 26 per cent of operations commenced in 1973. This suggests a somewhat higher rate of business failure than Jones and SaKong's survey data.[67]

Table 3.7 Corporate entry and exit 1966-1969

	Stock Year-end	Flow Entry	Flow Exit
1966	2,367	601	
1967	2,285	661	743
1968	2,310	644	619
1969	2,421	737	626

Source: Jones and SaKong, p. 174. Data for other years not available.

The life expectancy of the average Korean enterprise is therefore rather short, Korean enterprise being characterised by rapid entry and exit for about half of all enterprise. In part, as will be explained below, this is the result of entrepreneurial behaviour, and part is only to be expected in a rapidly changing economy. What remains unexplained is the very high failure rate of corporate enterprises shown in Table 3.7.

Jones and SaKong offer estimates of the sources of growth of companies in terms of gross value added and size of firm (Table 3.8). According to this, nearly three quarters of annual growth between 1962 and 1974 came from

Table 3.8 Sources of Real Growth of Value Added 1962-73)

Growth of average size (old firms expanding to new size)	72%
Growth in number of firms (new firms at old size)	3%
Gross product (growth of new firms at incremental size)	25%

Source: Jones and SaKong, p. 170.

existing companies, and just over a quarter from new firms. These calculations leave out the failure of existing firms. If smaller than average firms fail, while new firms are larger, then an additional element is added. Jones and SaKong pose the question of "why new firms were so much larger than the old?", but do not offer a satisfactory answer.[68] Further research is required into what actually happens when an enterprise fails. Is there extensive asset stripping, and a well developed market for secondhand machinery?. Whole quarters of Seoul in Chongyechon and Yongdongpo are devoted to the reconditioning of machines of every kind, are these then from failed enterprise? Whereas in the United Kingdom a defunct plant may stay idle for a year or more, is it rapidly put to a new use in the Republic of Korea? This question is important because if correct, bankruptcy does not represent any net loss to the economy, only to the individual, whereas if the plant is merely scrapped the investment is wasted. This would have repercussions for national accounting procedures for capital formation and depreciation.

Despite the erosion of very small firms with between 5 and 10 employees and the importance of exports of mass produced manufactured items which might be presupposed to favour large firms, the scale of the average Korean enterprise remains small. Consider that in the early 1960s the average number of employees in the Korean textile industry was only 31, compared with 266 in Pakistan and 1,500 in India. Interestingly the average in Japan was even lower at 29.[69] Even in 1978 the average Korean size of 87 was smaller than the Pakistan average in 1959. A further study of comparative size industry,

by industry may suggest that the Korean firm structure is closer to that of Japan than other developing countries.[70]

The final development to be noted in this section is that despite the Government policy of developing heavy and chemical industries during the 1970s which ought to have encouraged large enterpriese, Table 3.9 shows that small enterprise increased their share of exports during the 1970s, they also retained share of output and employment. This argues for an extraordinary dynamism in small and medium industry at a time when Government policy was supposed to be focussed on other areas of the economy.

6.3 Sources of entrepreneurs and entrepreneurial behaviour

Preserving the fiction that each establishment was a separate enterprise (much less true at the advanced end of enterprise), in 1960 there were about 7,000 entrepreneurs, and in 1966 perhaps 12,000. Is this a remarkable rate of growth? It suggests that there were 5,000 men waiting to become entrepreneurs (0.001 per cent of adult males between the age of 25 and 54 in 1960), or 5.9 per cent of male undergraduates in 1960.[71] Additionally, between April 1960 and May 1961 there was ample demonstration of pent-up energy and talent. When a National Construction Service was launched in January 1961 a highly competitive examination had to be held to select 2,000 graduates who had also completed military training as a cadre of this programme which when wound up in December 1961 was said to have created 25 million man-days of employment.[72] As late as 1964 only 10 per cent of graduates were said to be satisfactorily employed. At the same time over 2,000 army officers and perhaps as many civil servants were dismissed providing a fund of managerial talent.[73]

Jones and SaKong conclude "there was no sudden shift in supply in the early 1960s to explain the growth discontinuity. The initial change came from the demand side, but the resulting higher level of growth released social forces which together with Government approval, accelerated the rate of change on the supply side".[74] This is a very important issue from the point of view of lessons for other countries. If Jones and SaKong were correct, then in a country like the Republic of Korea, all that was lacking was a Government prepared to take the "critical one-time shift in the early 1960s as stability and belief in Government dedication to economic growth increased the expected return".[75]

Table 3.9 Export, output and employment shares of small and medium business

Division \ Year	1965	1970	1975	1976	1977	1978	1979	1980
Amount of Total Exports (A)	180,450	1,003,808	5,427,351	8,114,879	10,474,210	12,711,063	15,055,453	17,504,862
Amount of Exports by SMI(B)	41,591	322,865	1,871,456	2,924,005	3,654,373	4,621,105	5,291,571	5m623,849
B/A	23.0	32.2	34.5	36.0	34.9	36.4	35.1	32.1

% Year	1963	1970	1975	1976	1977	1978	1979	1980
Overall Industrial Output	1,786	13,878	83,406	118,698	156,785	214,908	270,871	368,422
Small Business Ind. Output	1,006	4,156	25,557	35,002	47,719	69,733	87,091	117,033
Big Business Ind. Output	780	9,722	57,849	83,693	109,066	145,175	183,780	251,389
Small Business %	56.3	27.5	30.6	29.5	30.5	32.4	32.7	31.8
No. of Total Employees	462,068	937,650	1,503,220	1,799,016	1,998,829	2,195,000	2,189,000	1,089,000
No. of Small Business Employees	288,157	451,456	680,050	789,302	914,168	1,031,000	1,041,000	1,031,000
No. of Big Business Employees	173,911	486,185	823,170	1,009,714	1,085,661	1,164,000	1,148,000	1,058,000
Small Businesses %	62.4	48.1	45.2	43.9	45.7	47.0	47.6	49.3

Source: Small and Medium Business Federation: Small and Medium Business in Korea, Seoul, 1981.

I believe that this is a simplification which would not produce the desired result if replicated in another country. First I would argue that the supply of entrepreneurs was indeed increasing rapidly during the late 1950s, and was augmented by a once-and-for-all input of ex-army officers and bureaucrats and managers. Secondly by focussing on the small amount of change between 1968 and 1974, Jones and SaKong miss the enormous growth between 1955 and 1969. In short, the Government in 1962 was pushing at an open door rather than creating a shift in demand. Rather than use the analogy of supply and demand, one might think of the Government operating a tap or series of taps more fully allowing the flow of entrepeneurial talent to proceed more easily. But entrepreneurial activity was implicit in the society that had evolved. It would not necessarily be so in other LDCs.

If national characteristics exist, it may be said that Koreans take to being entrepreneurs. This characteristic takes the form of a rapid over supply of enterprise whenever the foundation lay within the limited means of aspiring entrepreneurs, from the 1930s onwards.[76] Since 1961 it has been the continual mission of the Ministry of Commerce and Industry to prevent what is termed "reckless overcompetition". Small business co-operatives were founded in 1961 partly with the aim of reducing overcompetition through coordination, and as recently as 1978 a Small Business Co-ordination Act was passed to "prevent excessive competition among small businesses".[77]

The characteristic of the Korean entrepreneur comes close to that described by Keynes as "due to that characteristic of human nature that a large proportion of our positive activities depend on spontaneous optimism rather than a mathematical expectation whether moral or hedonistic or economic ... individual initiative will only be adequate when reasonable calculation is supplemented and supported by animal spirits, so that the thought of ultimate loss which often overtakes pioneers, as experience undoubtedly tells us and them, is put aside as a healthy man puts aside the expectation of death".[78]

This apt description of entrepreneurial behaviour explains both the appearance of prospective entrepreneurs and the rapid demise of so many Korean enterprises. There is strictly speaking no such thing as legal bankruptcy in the Republic of Korea. The proprietor of an unincorporated enterprise has unlimited liability extending beyond the entrepreneur (at least morally) to his family. Accordingly as noted above there are not figures for failed

enterprises.[79] Yet most Koreans in business aspire to own their own enterprise and every year a large number set up operations which from the outset look unpromising.

A review of the behaviour of Korean entrepreneurs suggests that the major problem is not a shortage of prospective businessmen, but a shortage of exploitable opportunties, or rather opportunities perceived as exploitable. In this view there are two very distinct sorts of entrepreneur:

a) The innovative entrepreneur as defined by Schumpeter and others as one introducing a new good method of production or other innovation.[80]

b) The imitative entrepreneur, who follows the first type of entrepreneur's lead, or has often been a manager or employee of type (a).

Entrepreneurs of type (b) predominated in the Republic of Korea, and perhaps predominate in any LDC or rapidly growing economy.[81] The critical constraint is not necessarily capital for many new enterpriese, but market information and lack of awareness of the state of art of technology in a given industry. The UNDP which has been running an advisory service for small and medium industry in conjunction with MCI and the Korea Federation of Small and Medium Business has frequently encountered obsolete practices where the most modern would pay for themselves in three to six months.[82] Other consultants have discovered industries where obsolete machinery has been imported at no less cost than more advanced models.

A further indication that it is not always access to credit which is the problem, is that funds set aside by the Small and Medium Bank for specific projects were not fully lent in 1978-79. The credit problem for small and medium industry (and in times of downswing for large enterpriese too) is more complex. Starting capital is not difficult to obtain for small enterprise providing the entrepreneur comes from the right social class, separation pay, family resources, credit from suppliers allow the initial investment, though this is likely to be undercapitalised.

Success brings its own problems. If the enterprise is not in the favoured sectors, no funds for expansion may be allocated via commercial channels. Unless all the sales are for export, working capital cannot be

obtained, let alone capital for further investment. Usually a customer is slow in paying, while suppliers begin to refuse to supply without payment. In fact the more the links in the chain of suppliers and customers, the more the squeeze operates on individual enterprises. Resort to the curb market only increases indebtedness, so the final squeeze is non-payment of wages. When a company fails there may be a domino effect on creditors and debtors. These are the problems of successful trading. To expand may mean selling or taking in a new partner, so that the original entrepreneur becomes a manager, or the new partner must be paid an executive salary.[84]

These problems are bad enough, but often the field of enterprise is oversubscribed so that would-be entrants poach craftsmen, offer deliveries below cost price in order to establish customers, and generally force down prices and eliminate profits. The only rescue for such operations had been inflation which runs down the real value of debts and allows monetary price increases which may be ahead of costs. It is this business environment which MCI has attempted to regulate in order to prevent "overcompetition". Thus at certain periods entry into new industries has been refused because MCI officials in conjunction with quasi-Government organisations and co-operatives have deemed the market saturated.

Whence this fierce incentive to start a business? The source is twofold: firstly the inadequacy of the investment market coupled with high inflation which makes owners of capital fear a rentier position which will (apart from the urban property market) erode their capital and not yield an adequate income; and secondly the large number of executives who either lose their jobs through company adjustments, compulsory retirement at 55 without a pension, or because they are tired of working for a large organisation.

Since these factors are general to the whole economy and culture it is not surprising that Jones and SaKong's entrepreneurial survey failed to reveal any outstanding characteristics of the Korean entrepreneur. Briefly their findings can be summarised as follows.[85] Assuming that the sample is representative, 26 per cent of entrepreneurs come from Kyongsang-do, the province of two successive Presidents and large numbers of civil servants. Twenty per cent come from provinces north of the DMZ, an origin felt to be discriminated again in higher Government service, and only 16.2 per cent from

Seoul. Cholla-do, the populous south-western province, provided only 6.7 per cent.[86] Even amongst chaebol heads the same provinces dominate. The average entrepreneur thought religion whether confucianism, buddhism or christianity irrelevant. Amongst those who profess beliefs, Confucianism, Buddhism and Christianity were equally represented, though given the proportions of the population stating their allegiance, Buddhists were markedly underrepresented and Confucians overrepresented.[87]

There is nothing particularly surprising about the family origins of Korean entrepreneurs. Nearly 50 per cent came from farming stock and 16 per cent were sons of manufacturers, and another 19 per cent were sons of other traders. However 50 per cent of younger entrepreneurs had attended Seoul National University and another 43 per cent other Seoul universities. Amongst older entrepreneurs the percentage was 20.7 per cent and 33.8 per cent respectively, though 17.8 per cent had attended a Japanese university.[88] Their fathers tended to have been better educated than the average, and this should be taken to mean that they came from families which were wealthier than average. Only 12.6 per cent had had military service despite the fact that the majority were of military age during the Korean war.[89] 50 per cent were first sons, contrary to the Korean notion that it is second sons who do best in business.[90]

From the same survey the average entrepreneur believes that conscientious hardwork is the most important quality of a successful entrepreneur, followed by rational and scientific thinking, skill in handling subordinates and on-the-job training and experience. Willingness to take risks, greater personal or family capital, and least of all good luck seemed the least important characteristics, and a good network of friends, education and skill in handling Government officials were of moderate importance. These are the results of internal evaluation and may not be the way those outside the privileged group of successful entrepreneurs see them.

The ranking of entrepreneurial motivation come close to those of Government policy-makers. Community responsibility, a desire to promote South Korea vis-à-vis North Korea and catching up with the Japanese all rank is more important than family responsibility (Confucian) or pursuit of wealth, fame and power or pursuit of excellence. This survey, if valid, is a striking

confirmation of the degree of consensus between Government and enterprise, which explain precisely how the two coexist so closely and harmoniously.[91]

6.4 The financial structure of the Republic of Korea's enterprise

While suggesting that finding capital was not an insurmountable problem for setting up a new enterprise, finding credit to keep the firm afloat is certainly the major preoccupation of all companies large and small. In seizing control of the banks in 1961 without compensation (and without protest, as the alternative was prosecution for corruption) the Government ensured that until a new status quo had established itself, loans were allocated on the basis of economic priorities, not personal relationships. By all accounts commercial banking in the 1950s was the least creditable part of enterprise. In 1960 the Special Law for dealing with Illicit Wealth Accumulation simply defined illicit wealth as having more than $200,000 in foreign loans or more than 10 million won (100 million hwan) in domestic bank loans.

It was fortunate that Korean entrepreneurs rated national prosperity above wealth and power, because otherwise the prospect of the Government seizing so much wealth without compensation would have acted as a powerful disincentive to investment. There remains amongst small businessmen, and even more among students and others, a strong association of great wealth with corruption, and little sympathy for a rich man who falls foul of the Government.

In analysing the Republic of Korea's entrepreneurial finance one is entering the darkest area of the Korean experience. Deliberate confusion and illiterate accountancy are the major problems. One cannot therefore be sure that any published figures reflect the true situation. The first fear is the tax inspector. The Corporate Tax Law gives special incentives to companies who can convince the Government that their returns have been substantially correct over a number of years. In 1975 there were only 282 green return corporations out of 12,532, including 142 which were Government-owned.[92] Other corporations could avoid investigation by obtaining the status of sincere return corporations. In mid-1976 there were 59 "sincere return" corporations and 857 "semi-sincere return" corporations.

The second problem is in accountancy. The law now requires all major enterprise to have their annual accounts audited by a firm of foreign accountants. Indeed in 1978 there were only 100 chartered accountants in the whole country. One major firm reports that by Western standards even the most advanced enterprise keep very poor accounts. If this is the situation at the top, the situation lower down the scale of companies is truly problematic. Accounting ignorance is not helped by rapid inflation which makes depreciation hard to calculate, and inflates debt-equity ratios.

Inflation appears on both sides of the balance sheet. Much of Korean entrepreneurial behaviour can be explained in terms of inflationary expectations. Unlike the Korean Government, the Korean business is well adapted to inflation. With both high growth and 10 per cent inflation, loans can easily be paid off out of new loans or profits. Historical, let alone indexed cost accounting becomes a somewhat academic exercise for most firms who are merely concerned about cash flows.[93] As long as growth was proceeding the appearance of a profit could be acceptable. Indeed under such circumstances the return on the original capital would appear high. When interest rates fell back to a very low real rate from the early 1970s, then borrowing rather than investing became attractive.

However the absence of a satisfactory capital or securities market and the elimination of the non-urban land market for speculative capital meant that apart from reinvesting profits, the opportunities for alternative investment were very few. Because inflationary expectations were high, it was difficult to retire by selling the going concern and invest money as a pension. Where enterprises were sold, they were normally sold on a profit sharing basis. This reduced the cost to the new purchaser, and sometimes the old owner was continued as an advisor.

Thus as a result of inflation, businessmen were encouraged to continue in business and encouraged to borrow and deterred from giving good accounts. The figures about to be discussed therefore require considerable caution. Table 3.10 shows the sources of corporate funds between 1963 and 1974. It can be seen that Government credit amounted to approximately 74.2 per cent in the 1960s (given that the Government owned all but the small commercial banks, the special banks controlled foreign loans and nearly all the items appearing as

others. Equity and reinvested profits amounted to only 25.8 per cent in this period.

Despite the impression of greater Government investment and control of credit after 1970, between 1970 and 1974, privately generated assets rose to 39 per cent These figures only apply to incorporated enterprise, and as we have seen these constituted only a small prportion of manufacturing firms. Moreover these are aggregate figures for all corporations, not merely manufacturing.

From the early 1970s under the influence of American advisors and American trained Korean economists, great concern has been expressed about the high debt-equity ratios of Korean companies. In fact it is probably mistaken to compare Korean companies performance to American companies in any respect as though American companies were the norm. As figure 3.3 shows, Korean companies had a structure very unlike American companies, but almost exactly like Japanese companies except for a lower disposable profit to capital ratio,

Japanese industry grew in the 1950s through the system of "overloans" from commercial banks and loans from special banks such as the Japan Development Bank. Such a process was not only an alternative route for financing industrial growth, it is actually inimical to the growth of stock markets.[94] While no detailed study of overloaning in the Republic of Korea has been made, there seems little doubt that the practice has been essentially the same as in Japan.[95] In both the Republic of Korea and Japan this has proved a highly successful method of buildup industrial capacity. It scarcely needs to be pointed out that it can only be done where the Government gives a clear direction to the banks as to which enterprise is to be supported (since the central bank underwrites the debt) and which not.

By the standards of United States financing, the Korean debt ratio is appalling growing from 151.2 in 1967 to 487.9 in 1980. Banks should not after all make unsecured loans. However, by West German standards Korean practice looks more acceptable, and by Japanese standards quite normal.[96] The profitability of Korean enterprises also looks unsafe by United States standards. As table 3.10 shows the net profit to gross capital and to net sales fell sharply at the end of the 1960s, as a result a number of firms went

bankrupt and the total number of manufacturing enterprises in the country actually fell (see Table 3.5).

Accordingly the Government took strong measures, the so-called August 3 measures of 1972 which were supposed to put company finances on a more "American" footing. This was one of the most dramatic interventions of the Government and preceeded the even more dramatic moves of October 1972 in the political sphere with the introduction of the Yushin system. As pointed out in Chapter II, it appeared that the Korean miracle was running out of steam with growth in the domestic economy flagging, which was also reflected in falling profits since 1969.

As a response the number of enterprises began to fall as profits slumped from an average of just under 7 per cent in the 1960s to 3.27 per cent in 1970 and only 1.18 per cent in 1971. When it is recalled that exporting firms were still flourishing, the domestic firms must have been performing considerably less well than the average figure suggests.

The Government's analysis was that "business firms could not slough off a vicious circle of starting with brisk investment in facilities, going through dependence on outside capital, high costs of borrowing, low rates of return, inadequacy of plowed back capital, fund shortage, increased borrowings, deterioration of the financial structure, the rise in financing costs and low rates of return".[97] The danger in this situation was a failure to reinvest and replace under-maintained machinery.

The Government used this opportunity to attack the curb market by freezing all curb market loans, by floating industrial securities which were used to pay back 30 per cent of short term loans to private firms and by founding an Industrial Rationalisation Deliberation Committee which was "to increase productivity and to build up international competitiveness by means of business merger, the renovation and expansion of existing facilities. Tax concessions were given to firms which merged, to those who converted disguised curb market loans into stocks, undertook technological research, undertook import substitution investment, and accelerated rates of depreciation".[98]

Table 3.10 Profitability of the Korean firm 1962-1972

Trend of Business Firms Profits (Manufacturing Industry)

%

		1962	*1964*	*1966*	*1968*	*1970*	*1971*	*1972*
Net Profit to Gross Capital	1)	9.09	7.48	7.78	5.33	2.49	0.89	3.44
Net profit to Net Worth	2)	23.05	15.01	16.93	16.05	10.67	4.41	14.21
Net Profit to Net Sales	3)	7.26	8.58	7.90	5.96	3.27	1.18	3.94
Payable Interest & Net Profit to to Gross Capital	4)	13.33	11.75	13.48	10.60	9.49	8.37	9.61

Source: The Bank of Korea

Note: 1) Net profit to gross capital = net profit/gross capital

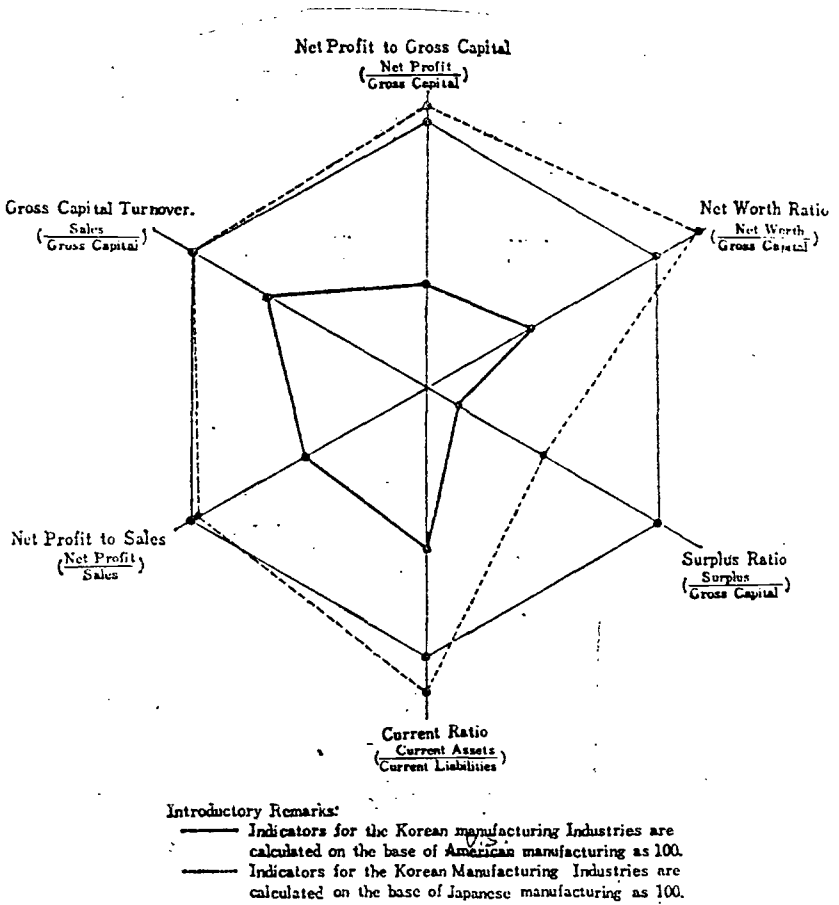
2) Net profit to net worth = net profit/net worth

3) Net profit to net worth = net profit/net sales

4) Payable interest & net profit to gross ciptal = payable interest + net profit/ gross capital

Source: EPB: Economic Survey of the Korean Economy, 1972, Seoul, 1973, p. 178.

Figure 3.3 International comparisons of manufacturing firms



Source: EPB: Economic Survey of the Korean Economy, 1972, Seoul, 1973, p. 182.

Table 3.11 Debt ratio, ratio of interest payments to net sales and net profit before tax by sector 1978 and 1980

	Net profit		Interest to net sales		Debt ratio	
	1978	1980	1978	1980	1980	1980
Manufacturing (3)	3.9	-0.2	4.5	6.7	366.8	487.9
Food (31)	6.3	1.8	3.3	5.2	359.5	471.9
Textiles (32)	1.8	-0.8	5.5	7.0	548.6	820.1
Wood and furniture (33)	4.0	-6.8	2.8	8.3	560.4	2051.4
Paper and publishing (34)	2.3	0.0	4.3	6.7	330.9	382.8
Chemicals (45)	5.3	1.9	3.2	4.5	228.2	414.7
Non-metallic (36)	4-6	2-8	5.6	8.2	406.9	227.9
Basic metals (37)	5.2	-1.3	5.1	8.7	301.9	496.5
Machinery (38)	2.3	-3.4	5.3	9.2	477.7	403.0
Others (39)	1.8	1.5	3.5	5.9	408.0	310.0

Source: BOK: Financial Statements Analysis, 1979, 1980.

The effect of all these measures is difficult to assess, given that 1973 was an unprecedented year for economic growth, which raised the average net profit from 3.94 per cent in 1972 to 1960s levels of 7.49 per cent. Nevertheless the net number of establishments actually fell. Efforts to promote the stock market at the same time led to the listing of an additional 38 companies (from 66 to 104), but this development was cut short by the collapse of the stock market when the October 1973 oil price increases were announced.

The measures did not permanently improve debt equity ratio, rather it grew steadily worse. Profitability was already recovering in 1972 before the Government took action (though this information would not be available to policy-makers at the time), a good illustration of Government over intervention. Table 3.12 shows the debt ratio, ratio of interest payments to net sales and net profit before tax by sector for 1978 and 1980. As the debt equity ratio has increased, net profit to capital offers a rate of return of 17-21 per cent. But in terms of the profit and loss statement, the net profit is very low, even in a boom year like 1978. The profitability of the key sectors, textiles, clothing and leather (32) and machinery is much lower than that of other sectors. Electronics has a modest 2.9 per cent, but shipbuilding experienced a pretax loss of -9.3 per cent. The debt ratio was one of the highest at 1073, in 1978 and 10 per cent of net sales went on interest charges.[99]

These profits have to be compared with those in other sectors of the economy. Retail trade (62) had net profits of 6.4 per cent, higher than any two digit manufacturing sector, hotels (63) 8 per cent, real estate (81) 12.3 per cent, business services (82), 10.6 per cent, motion picture production and distribution (91) 19.5 per cent, other services (99), 13.8 per cent. If these profits have the same level of accuracy as those of manufacturing, then a rationally calculating entrepreneur or a commercially-oriented bank would be directing investment into the tertiary sector. There are indications that in recent years, entrepreneurs have done precisely this notably in the rising share of services in GNP. The only new chaebol to emerge in the last three years, Myongsong, has its major companies in the tertiary sector.

The Government continued to cajole companies into going public, so that by 1978 there were 355 listed companies. Companies did so with ill grace, and

in the case of chaebol only one or two of the sister companies were offered for sale. As pointed out above, an active equity market implies a large number of people with high incomes, but no wish to be active in enterprise, or a large number of institutions building up portfolios. Neither have existed in the Republic of Korea in the 1970s. Where savings are held in an institutional form, savers wish to have speedy access to both capital and interest, and despite the high dividends given by listed companies, savers have preferred banks.

This situation may change in the 1980s. If inflation stays low and dividends high, the equity and bond market may look much more attractive. Likewise heavy borrowing from the banks will be less attractive if real interest rates seem permanently high. The current Government policy aims in this direction, but it should not be concluded that more orthodox financing will provide a similar rate of industrial investment.[100]

The Industrial Rationalisation Deliberation Committee turned to other aspects of company structure, and the main beneficiaries have been the chaebol. Indeed in accounting for the change in Government attitudes towards industrial conglomerates, the sense of crisis in enterprise management between 1969 and 1973 may be the most important facet. MCI began to believe that small enterprise was less 'reliable' and capable of achieving the chosen goals of national development which now included the creation of world league companies which could compete with multinationals on their own terms.

This highlights one of the major problems of the Korean model at the present stage. The Government acknowledges the importance of small and medium enterprise, but is anxious to achieve international competitiveness which means new investment in plants which equal the most efficient in the world, which on the whole means very large scale enterprises. Only in this way can Korean exports be competitive without Government subsidies and export led growth continue. Given constraints on resources in the Korean context this means channeling funds in the direction of already large enterprises, or expanding the public sector. Why the former alternative was chosen when in the 1960s the latter had been pursued remains to be discussed.

The Government injected a further ingredient into this already complex picture since it decided to give small and medium industry a role in its new

rural development policy, the Saemaul Undong. Along with measures to build up co-operatives and the vertical affiliation of business, it was decided that small and medium industry should 'transfer their production base to rural areas'. Very large amounts of money were injected into small and medium industry with the aim of setting up Saemaul industries which would also become viable export industries.[101] This had only limited success in this policy with 15 per cent of Saemaul factories having suspended operations by 1980.

Theoretically the two halves of Government policy were supposed to balance. In practice, because the support for large enterprises was working in closer harmony with the direction the market was pushing Korean industry, than the policy of rooting out undercapitalised small enterprise and dispersing them into the countryside, where they were deprived of the benefits of agglomeration, the growth of large businesses was assured. Under the circumstances it is not perhaps surprising that in late 1972 the Korean Chamber of Commerce and Industry found 80 per cent of big business in favour of the August 1972 measures and subsequent measures, but only 50 per cent of small business.[102]

6.5 Public enterprise

In seeking economies of scale the Government has a clear choice of policy mix as to whether it should give equal support to public enterprise, big business and foreign investment or whether it should intervene to sway the balance. Given that in the Republic of Korea the Government was directing between 60 and 70 per cent of investment, either directly or indirectly, it is obvious that the mix of these three would reflect the aggregate of Government decisions, though not necessarily a coherent conscious policy.

The role of public enterprise has already been discussed in Chapter II. Here it is sufficient to note that there was not standard form for public enterprises, consistent with the thesis that the Republic of Korea's use of public enterprise was largely pragmatic. Seventeen in 1974 were departmental agencies, 18 public corporations and 65 joint stock companies and eight structure in miscellaneous ways.[103] The type of structure appears to have had little effect on the degree of autonomy of the various types of enterprise.

The abandonment of the policy of developing public enterprise has already been discussed. The origins appear to be in the prejudice of the majority of foreign consultants used by the Republic of Korea against public enterprise on the grounds that it can never perform as efficiently as private enterprise. Hence Jones and SaKong write defensively "we have argued that the public enterprise sector is relatively efficient by international standards. This is not to deny that it is often less efficient than private enterprise, leaving ample room for improvement through reforms of the control structure mentioned above. Nonetheless, from the international point of view, the surprising feature of the sector is not its inefficiency relative to the private sector, but that the gap is as small as we believe it to be".[104] Nevertheless as Appendix Table 5 shows public enterprises share of GNP remained constant throughout the 1970s.

The problem lies not in public enterprise, but in the neoclassical notion that a large private firm is solely a profit maximising enterprise. Given that managers are usually more concerned with personal promotion prospects than the global view of profit maximisation of the whole firm, in pragmatic terms, there is no reason why a public enterprise cannot be as efficient as private enterprise. In the Korean context there are two reasons why public enterprise might be more efficient than many private enterprises. The first is the budgeting problem. As Jones points out, General Park, President of Pohang Iron and Steel Company (POSCO) may be able to bypass the bureaucracy in many ways, but when it comes to "minor matters (say the acquisition of a non-budgeted truck) the signature of relatively low-ranking ministerial officials is required".[105]

The nature of this problem has led public enterprise to be much more cost conscious than many private enterprises. Because of the scrutiny with which their annual budgets are investigated they develop far more effective accounting systems which can identify profit centres and loss-making activities. Moreover because budgets were inevitably scaled down by Government officials, the ability to squeeze extra profits out was highly advantageous. Secondly given the share national goal of national development, lower grade officials may be more scrupulous about their jobs than in private companies where the company may be seen as alien.[106]

Finally public companies were forced to think in longer terms, with more efficient planning. Advanced market intelligence needed to be superior to that of many companies, bargaining with suppliers for the best terms and forward buying all marked the public company out from most Korean enterprise. In short, the special skills which large Korean companies were only just acquiring in the later 1970s were forced on public enterprises from the mid-1960s onwards. Foreign businessmen and commercial attachées in 1978-79 invariable singled out POSCO and KECO (the State-run electricity company) as the most modern and efficient enterprises.

Despite the build up of private companies under the Heavy and Chemical Industry Plan as was shown in Appendix Table 5, public enterprise retained its share of manufacturing value-added. This achievement, in the face of a loss favourable Government attitude, is significant since the literary evidence suggests otherwise. In 1980 as part of the industrial reorganisation, a giant new public enterprise, Korea Heavy Industry Co., was created to take over the Changwon Complex from Hyundai International.[107]

6.6 Foreign investment

The role of foreign investment is discussed in more detail in the sectoral study on electronics. The full statistical picture of foreign investment is not easy to obtain. The commonly reproduced figures give only the number of firms authorised. However no figures are available on how many of the 863 firms authorised between 1962 and 1979 actually arrived, and of those how many are still active. In 1972-3, 445 Japanese firms were authorised to make joint investments, or half the total number of foreign enterprises authorised. However a large number of these did not complete their investment as a result of oil crises. Further the figures are not deflated to allow an assessment of total real investment. Even if they were, as Cohen points out "much of the machinery used by foreign firms in the Republic of Korea was used elsewhere before being brought to the Republic of Korea. Its value on the book of the firm in the Republic of Korea is heavily influenced by the tax laws of the Republic of Korea and of the country of the parent firm".[108]

Table 3.12 shows the distribution of companies by sector. At the end of 1978, 726 manufacturing projects had been approved. The largest sector is

electronics, to be discussed below. Machinery and chemicals come second and third, but the fact that there are 79 joint ventures in textiles and clothing is more surprising. 100 of these companies were located in the two free trade zones, Masan and Iri. Of the 88 at Masan, 78 were Japanese. The remaining 626 are scattered throughout the country. They ranged from very large and well known concerns such as General Motors, Dow Chemicals, Control Data, or KOCO (Korean Government and Gulf Oil) or Honam Oil, a private joint venture with Caltex, and Kyoung-in Energy with Union Oil, to very small joint ventures like Spirax-Sarco and Foseco Korea Ltd which employ less than 50 employees.

The contribution of foreign firms in terms of the introduction of new products, new managerial skills and organisation methods is a commonplace of development literature. This process can certainly be observed in the electronics industry, but the surveys of Cohen in the early 1970s suggest that the benefits of joint ventures are far from uniform.[109] His findings show that the efficiency of joint ventures varies greatly, and is not necessarily better than the best Korean practice and serve as a cautionary warning that not all joint ventures bring benefits.

This is a warning few Koreans would need, and one of the successes of the Korean model has been the degree to which foreign investors have been screened by MCI, and the degree to which Korean industry has learned from joint ventures and then wholly owned Korean companies have surpassed them in technology and efficiency. On paper the terms for foreign investment look attractive in terms of provision of site and services, generous tax breaks and procedures. Since the Republic of Korea is in competition with other developing countries the terms must be broadly competitive with other NICs.

Unlike Singapore or Hong Kong, Korean reality has been much less attractive. Joint ventures are regarded with suspicion in most of the lower ranks of the bureaucracy. This is partly explained by the fact that 78 per cent of authorised ventures are Japanese, and hostility against the former coloniser remains strong in most sectors of Korean society. Schemes were rigorously scrutinised during the 1970s. Whereas, under the Second Plan 1966-71 foreign investment during most of the 70s it was limited to 100,000 million dollars per annum.

Table 3.12 Foreign investment approval by industry
(As of Dec. 31, 1978)
(in Thousand US Dollars)

	No. of projects	Amount	Composition (%)
Agri. For. and Fishery	51	14,291	1.4
Agriculture and Foresty	27	7,548	0.7
Fishery	24	6,743	0.7
Mining and Manufacturing	738	743,461	73.7
Mining	12	2,548	0.2
Manufacturing	726	740,913	73.5
Food and Beverages	10	3,135	0.3
Textile and Wearings	79	99,663	9.9
Wood Products	4	663	0.1
Chemicals	95	193,540	19.2
Medicine	10	5,049	0.5
Fertiliser	4	41,825	4.1
Petrochemicals	6	70,845	7.0
Ceramics	25	13,067	1.3
Iron and Steel, Metalics	62	48,050	4.8
Machinery and its spare parts	115	76,273	7.6
Electrical and Electronics	197	131,010	13.0
Transportation equipment	12	37,397	3.7
Others	107	20,396	2.0
Services	68	250,676	24.9
Banking	9	38,249	3.8
Construction and Services	21	34,682	3.4
Transportation and Storage	11	14,542	1.5
Hotel	27	163,203	16.2
TOTAL	857	1,008,428	100

Source: EPB, Guide to Investment in Korea, Seoul 1979, p. 113.

Foreign companies not involved in the export zone estates were not permitted to own more than 50 per cent of equity.[110] Moreover although unionisation was not encouraged, "foreign institution workers union" has existed with Government blessing. By 1979 there were branches in 238 foreign operations.[111] The "Provisionsl Exceptional Law concerning Labour Unions and the Settlement of Labour Disputes in Foreign Invested Firms" of January 1970 sets out a disputes procedures which "is characterised by direct Government intervention through mediation and compulsory arbitration".[112] As opinion hardened against foreign companies, Government decisions in this sector were far from favourable to many foreign enterprises.[113]

Policy changed abruptly in 1980, with the declaration that even 100 per cent equity would be permitted for new investment and most areas of the economy would be opened. However potential investors still had to get past MCI which remained determined to see that no investment which did not yield the maximum benefit to the Republic of Korea was passed. Indeed in the last three years several major investors have been given a tough time, being treated as through they were Korean firms. Gulf Oil and Control Data withdrew from their Korean operations, and Dow Chemical took the Government of the Republic of Korea to court and lost its case.[114] A number of Japanese firms withdrew for more mercenary reasons, their investments of the early 1970s had yielded the expected return and had never been intended to last more than ten years.

The case of Dow Chemicals highlights an important facet of joint ventures in the Republic of Korea. As part of the industrial restructuring moves from 1980 onwards Dow was ordered to merge two operations. Is a joint venture regarded by the Government of the Republic of Korea as a Korean firm, or as a special case? There is considerable evidence to suggest both Government and the Korean partner regard it as a Korean operation with foreign capital. The degree to which this is true depends on the original agreement, the number of foreign technicians and the character of the foreign vice-president, and the Korean partner. Relations in some Japanese joint-ventures are now so bad that the Japanese head office will not supply the latest machines because of fear of competition.[115]

During the Fourth Five-Year Plan, the Government encouraged technology licensing as an alternative to joint ventures. Enterprises licensing technology have not necessarily fared better as the following quotations from an unpublished report on the metalworking industries written in 1978 suggest. "Some Korean manufacturers point with pride in their company catalogues to the names of famous American and West European manufacturers with whom they have license agreements... When I noted that they had listed several famous American companies who are direct competitors; it was obvious that they could not have acquired current vintage high quality products to build in the Republic of Korea, from such dedicated competitors"; and secondly "I was disappointed to note the number of better companies who have opted to build 'Plane Jane' industrial equipment of obsolete Japanese design. I do not consider this to be a wise product selection".

Throughout Korean industry it has been suggested that joint ventures have provided much better inputs than technology licensing, and if the metal working industry is anything to go by, a great deal of investment has been wasted on obsolete capital goods. As to enterprises the same report criticises the poor standard of plan layout, the inefficient way in which modern plant is operated and the fact that superannuated machinery is still being operated without regard to the economic cost, compared with reinvesting.

Although no thorough study has ever been conducted, there are strong qualitative indications from all quarters that this situation was common to a large swathe of Korean firms prior to 1979. It is partly related to the problems of poor accounting techniques and the vicious cycle of investment referred to above. It is also a reflection of the low level of managerial skills in the averge Korean enterprise. That Korean business continues is therefore a reflection of low wages and very long hours by both production and managerial staff.

Both the Korea Employers Federation and the Korea Chamber of Commerce believe that the recession of 1979-81 has led to a marked improvement in the management of Korean companies at all levels, with more attention being paid to manning levels and production organisation. The consequences for labour will be considered in the next Chapter.

6.7 Conglomerates (chaebol)

The general view of management consultants is that the current state of Korean enterprises is very uneven. If the average company has been described above, there are outstandingly efficient companies both among small and medium enterprises and especially amongst the chaebol.

The rise of the chaebol is a controversial issue, and while a matter of great popular concern in the Republic of Korea has not been adequately studied.[116] For the present summary one is mainly dependent on the studies by Leroy Jones and SaKong Il. The problem is accurately diagnosed by Jones in his recent paper into a left-hand and right-hand view, as to how business concentration has come about and whether it is good or bad. The increasing concentration has come largely:

> as the result of a circular political-economic process in which big companies get more credit and can influence Government more. This leads to resource inefficiency and measure to control the negative consequences of existing concentrations of economic power.
>
> as a natural result of the economic growth process itself. The rapid rise in business concentration is thus merely one inescapable facet of Korea's transformation from a primitive economic structure to one which is modern and internationally competitive.[117]

Two aspects do not emerge from this summary. The first is that according to Table 3.9 small and medium enterprises have not suffered as a result of this concentration of power. In terms of exports, share of employment and number of enterprises remain much the same as in 1970, while the share of industrial output has risen from 27.5 per cent in 1970 to 32.7 per cent in 1979. Conglomerates have therefore done no more than grow with the same speed as the rest of Korean industry. If there is increasing concentration then it is within ownership of big business.

Secondly there can be little doubt that the switch from passive exporting to active exporting in the 1970s favoured large companies. Concentration on export-led growth must inevitably lead to integration with the world market.

This can be done through the increasing penetration of a domestic industrial structure by multinationals or by the growth of companies of sufficient scale to sustain large numbers of branch offices, maintain plant with the economies of scale necessary to compete with multinationals and ultimately an R and D capacity to develop new products. It might be argued that a third strategy in which the state performs all these functions was actually pursued successfully in the Republic of Korea in the 1960s, but since 1973 the State has formally been retreating from such activities.

Jones points out that whereas in the Western world concentration tends to take the form of monopoly control of a single product type, in Asia generally whether in Hong Kong, Japan, India or Pakistan, the tendency is for "business concentration", in which companies spread their interests across a wide range of economic activities. The most common frame of reference is with the Japanese zaibatsu. However it is probably more accurate to regard the Korean chaebul as being in a class of their own. There are 46 chaebol according to Jones and SaKong's classification. Of these 11 had large enough turnovers to be classified in Fortune's list of top 500 non-United States companies in 1980, see Table 3.13.[118] In 1978 these 46 enterprises produced 43 per cent of value added in manufacturing, 37 per cent of value added in construction and 32 per cent in finance, insurance and real estate. The nine companies which qualified for Fortune's list in 1978 constituted 26 per cent of all LDC oil and non-oil firms. Five of these companies, Samsung, Lucky, Hyundae, Daewoo and International Chemicals produce nearly 20 per cent of Korean manufacturing value added. These companies produced 31.7 per cent of value added in heavy and chemical industries and 5.7 per cent of light industries, companies with 59.7 per cent of heavy industry for the whole group of 46 and 27 per cent of light industry.[119]

Until the end of the 1970s all chaebol were still headed by their original founders. They are therefore in what might be termed their immature stage, comparable with the zaibatsu in the Meiji period. Early indicators are that the second generation will be more "management and efficiency" oriented and less growth-oriented. Unlike the zaibatsu, until the sale of the commercial banks, none of the chaebol owned financial institutions except Samsung which owned Dongbang Life Insurance Company, one of the big five Korean life insurance companies.

All the companies were therefore heavily dependent on the Government controlled banking system. This does not mean that the Government necessarily set out to create the chaebol. MCI clearly intended to create companies which could produce with economies of scale which would compete with the larger competitors in the rest of the world. To do so they had to either persuade existing entrepreneurs to invest in new industries, or allow new companies to rise quickly. The best demonstration of the power of the Government can be seen in the collapse of two chaebol, Yulsan and Jese.

Yulsan was founded with an initial capital of only 2,000 dollars in 1975. By 1977 it handled 165 million dollars worth of exports (1976, 42 million). By 1979 when it collapsed it had 14 companies in exporting, construction, aluminium, shipping, engineering, electronics, foodstuffs, construction materis etc., and a capital of $230 million. Its collapse was not so much due to over-expansion as to a deliberate decision by the banks not to provide further credit to overcome a liquidity crisis. The collapse of Yulsan also brought the dismissal of the heads of four of the five commercial banks, but it is inconceivable that the heads of four banks would all be susceptible to illegal actions.[121] Jese, though smaller, was in the same mould, collapsing for similar reasons. Both founders were in their 30s, and much disliked by the older chaebol leaders. It is noteworthy that the one big bank not to lend to Ulsan was that controlled by the Korea Traders Association.

Jese and Yulsan were the last two chaebol to emerge in the Republic of Korea, apart from Myongsang which has risen since 1979. Nevertheless in theory the emergence of these three show that it is still possible for new chaebol to come into being. The rise of Yulsan and Jese gives an indication of the way in which the chaebol have grown. It has been noted that small and medium industry was retaining its share of production, value added and exports during the same period. While part of the chaebol's growth (from 32 per cent of manufacturing value added to 49 per cent during the decade) with the resul of new investment, this would only provide for incremental growth, the rest came from buying up other existing large enterprises at bargain prices. Examples taken over by Yulsan were Kyong hung fashions, founded in 1963, and Miwon a smaller conglomerate founded in 1956.[122] The chaebol became larger by preying on other larger companies.

Table 3.13 Korean companies ranked in Fortune's largest 500 non-United States companies - Sales in 1,000s

1979 Ranking	1978 Ranking	Company	Sales
80	78	Hyundai	4,303,841
109	154	Samsung	3,409,700
-	155	Daewoo	-*
165	199	Korea Oil	2,315,841
227	134	Lucky Group	1,760,362
258	-	Hyosung	1,558,439
321	407	POSCO	1,249,777
334	368	ICC	1,188,684
393	-	Korea Explosives Group	936,000
425	484	Ssangyong Cement	869,823
432	434	Sunkyong	852,137

Source: Fortune Magazine.

* Excluded because figures not available.

Table 3.14 Corporate structure of Samsung in 1980

Year	Company	Type of Activity
1975	Samsung Co. Ltd.	Trading
1975	Samsung Electronics Co. Ltd.	Electronics Industry
1979	Samsung Electron Devices Co. Ltd.	-"- -"-
	Samsung Corning Co. Ltd.	-"- -"-
	Samsung Electronics Parts Co. Ltd.	-"- -"-
	Korea Telecommunications Co. Ltd.	-"- -"-
1973	Cheil Sugar Co. Ltd.	Manufacturing Industry
1975	Cheil Wool Textile Co. Ltd.	-"- -"-
1977	Cheil Synthetic Textiles Co. Ltd.	-"- -"-
1972	Chonju Paper Manufacturing Co. Ltd.	-"- -"-
	Samsung Foundation of Art and Culture	Culture and Welfare
	Samsung Employees Aid Foundation	-"- -"-
	Samsung Heavy Industries Co. Ltd.	Heavy and Chemical Industry
	Samsung Shipbuilding Co. Ltd.	-"- -"-
	Samsung Precision Industries Co. Ltd.	-"- -"-
	Samsung Petrochemical Co. Ltd.	-"- -"-
	Taesung Heavy Industries Co. Ltd.	-"- -"-
	Korea Engineering Co. Ltd.	-"- -"-
1968	Samsung Construction Co. Ltd.	Construction & Dev. Industry
	Joong-ang Development Co. Ltd.	-"- -"-
	Yong-in Farm Land	-"- -"-
	Hotel Shilla Co. Ltd.	Service Industry
	Shinsegae Dept. Store Co. Ltd.	-"- -"-
	Ankuk Fire & Marine Insurance Co. Ltd.	-"- -"-
	Dongbang Life Insurance Co. Ltd.	-"- -"-
	Anyang Country Club	-"- -"-
	Dongnae Country Club	-"- -"-
	Korea General Hospital Inc.	-"- -"-

Source: Samsung.

The question which remains to be asked, but cannot be answered, is how far the chaebol were assisted by banks and political influence in bringing the older companies to the point of selling up. Many were undoubtedly less efficiently managed. However others might have survived short-term liquidity crises.

The sources of growth of the chaebol answer in part the question posed earlier about the effects of business failure. Any company that failed was likely to be taken over by a more secure company if there was any business prospect at all. Likewise many constituent parts of Yulsan are still trading under their pre-Yulsan names.

Table 3.14 shows the business organisation of Samsung, once the largest chaebol in 1975, though since overtaken by Lucky and Hyundai.[123] The founder Lee Byong-chull began in business in Daegu in 1938 in retailing, but like most chaebol founders started in import substitution in the 1950s with the three Cheil (first/best) companies. In the later 1950s he acquired numerous enterprises and purchased nearly half the shares in the commercial banks at the end of the Rhee regime. He narrowly avoided prosecution and confiscation to emerge as the business leader under the early Park regime, being in a position to buy Seoul's second department store in 1962, Shinsegye.

To avoid prosecution he was to have built a fertiliser plant as part of the "compensatory entrepreneurship" scheme worked out between himself as President of the Federation of Korean Industry and the Military regime. Although this scheme was cancelled, he built the Han Kook fertiliser company in 1964 one of the largest enterprises of the period. When the saccharin smuggling scandal broke in 1966 (the great corruption scandal of the 1960s), the fertiliser company was implicated and as a penance Lee donated 51 per cent of the shares to the Government in whose hands it has remained to this day.

Samsung continued however to expand moving into electronics in 1969, synthetic textiles in 1972, petrochemicals and heavy industry in 1974-77. The developments of the 1970s were typical of the chaebol, in which MCI and the chaebol carved up the market for different types of equipment to allow a duopoly structure, and then MCI arranged the credit. According to his memoirs Lee was the most reluctant of the chaebol leaders to invest in untried fields,

and so far his companies have avoided the forced mergers of the 1980-81 period which began when it was realised that the scale of the market would not support a duopoly.

The history of Samsung resembles a number of other chaebol in that most trade their origins back to the pre-Park era, and many would have been the market leaders at a much earlier date but for Government constraints in the 1960s. All benefitted from the Heavy and Chemical Industrial Plan and the decision that although the Government would directly or indirectly provide the credit, it would not take any part of the equity of these new enterprises.

On balance the relationship between chaebol and Government has been an uneasy one. Sometimes the Government could get its way, notably over the creation of heavy and chemical industry, though it was not inevitable. A dispute arose between the founder of Hyundai and his younger brother over the project at Changwon complex to build electrical generators, boilers and other equipment for power plants. When the founder believed it was unviable or too capital-intensive, his brother created a new concern, based on Hyundai International, which severed all connection with his brother. As a bonus, the younger brother received a license from the Government to build a caprolactam plant, a cement plant and other subsidiaries.[124]

Events vindicatd the older Hyundai in that in 1980, the Government seized the Changwon Complex which was undergoing considerable teething problems, although foreign consultants report that these had been solved, and formed a new state company Korea Heavy Industry Corporation.[125] This however was part of an attempt to force the chaebol to adjust their position both by Government directed mergers which the Government believed would produce larger and more efficient companies, and to get the chaebol to deinvest. In December 1980, 26 business groups were ordered to dispose of 166 affiliated companies on a "self regulatory basis" by 1984.[126]

This was not only the most remarkable intervention in company affairs, far exceeding any comparable measure during the preceeding 19 years, it was also ill thought of. Hyundai Motor Company was ordered to merge with Saehan, without consulting General Motors, Daewoo's partner in Saehan Motor Company, as though General Motors would not have any opinion in the matter. Likewise another merger brought the lawsuit by Dow Chemicals against the Korean

Government. Many of the companies which were to be disposed of were small companies which had voluntarily associated themselves with the chaebol in order to get access to credit and marketing and technical information. The end results of this measure cannot yet be evaluated, but it was a strange way for a Government declaring itself to be withdrawing from intervention in the economy to begin its administration.

One earlier important measure was the creation of general trading companies in 1975. In 1975 when the need to create new markets away from the traditional ones of Japan and the United States was most urgent, the Government created the concept of general trading companies (or borrowed it from Japan). These were to be companies specifically handling exports not only of their own products but of other products, which would set up agents throughout the world and pioneer new markets, not as KOTRA had done through information, but by actually selling the products.

In order to do this these G.T.Cs were given certain privileges, chiefly the ability for branch offices to issue letters of credit and credit in advance of sales.[127] These companies were intended to spearhead the breakthrough in the Latin American and African markets. In practice they discovered the Middle East and Europe, and took a commanding position in the traditional markets. By 1977, the 13 Korean G.T.Cs, one of them owned by the State, handled 24.6 per cent of Korean exports. By 1979, 12 G.T.Cs handled 35 per cent, and by 1981 over 40 per cent. When it is remembered that a sizeable porportion of exports are handled by foreign firms, chiefly those for the Japanese and United States markets, the true proportions of this achievement appear.

In several respects the Korean G.T.Cs differ from the shoga shosha of Japan. When the shoga shosha were created by MITI in the 1950s, the several thousand trading companies were forced to merge to form 40 shoga shosha. Companies were then told if they did not choose a trading company they would be forced to become associated with one. In the Republic of Korea the normal trading companies remained in existence, as competitors with the G.T.Cs.

Nor has the formation of G.T.Cs led to a growth of sub-contracting as it appears to have done in Japan. If the figures reported in Table 3.15 are correct, then there has been no increase in sub-contracting between 1967 and

1978. This may well be correct. With access to credit, chaebol have been in the position either to take over companies directly, or to found new ones with more up-to-date equipment and more efficient management. Indeed there seems to be something in the Korean character which dislikes sub-contracting, regarding it as a loss of independence. Complaints abound of non-payment for contracted goods and of late delivery and inferior products on the other.[128]

Since 1980 the Government has embarked on an ambitious ten year plan to develop small and medium industry.[129] This includes reserving certain industries purely for small and medium industries. This decision was taken after an exhaustive analysis of Korean industry by the three digit classification system. In addition adequate funds are to be made available, not only by the Small and Medium Industry Bank and the Citizens National Bank, but commercial banks are to make 35 per cent of their lending to small and medium industries. Officials at MCI recognise that many features of the Small and Medium Industry plan are at variance with the desire to withdraw from direct intervention in the economy and let the market make the decisions, but it is widely felt that this is necessary for the future of Korean economic development.

Are the Koreans correct to be so worried about the chaebol? The need to compete with major internationals remains, and to a considerable extent the larger chaebol are now in a position to move Korean industry into the forefront of current technology, indeed are already doing so in the electronic industry. The concern is rather political. The companies are owned by single families, increasingly intermarrying. The Korean Government for all its power has been far from successful in persuading the chaebol to make their companies public. As can be seen from figure 3.4 it is the older companies in the Samsung group and the electronics group which are listed, whereas none of the heavy and chemical companies are on the stock market.

There is only limited evidence to suggest that workers might suffer from being employed in large company, rather than the reverse. Thus from the point of view of employees, the encourgement of small and medium industry is not necessarily a good thing. The reference to the importance of small and medium industry in Japan as a yardstick for the Republic of Korea is hardly consoling either, since in Japan, conditions of labour in small industry is far inferior to that in large companies.

Table 3.15 Sub-contracting in manufacturing: the Republic of Korea and Japan

Establishment Size	Percentage of Establishments Engaged in Sub-Contracting				
	Korea		Japan		
	1967[1]	1978[2]	1966[1]	1966[3]	1973[4]
1-3	-	-	53.6	6.0	11.5
4-9	-	-	52.3	-	33.9
5-9	8.3	14.9	-	21.2	-
10-19	17.9		54.8	37.5	48.4
20-29	29.8	22.8	54.5	50.1	58.9
30-49		24.7	55.6	56.5	64.0
50.99	27.4	28.4	50.9	65.6	69.3
100-199	25.1	31.0	56.6	70.0	75.8
200-299	23.7	-	55.5	72.4	77.6
300-499	-	-	-	71.3	80.3
500-999	-	-	-	76.2	82.3
1000+	-	-	-	78.9	83.
All	18.2	18.6	53.6	22.6	-

[1] Susumu Watanabe, "International Sub-contracting, Employment and Skill Promotion", International Labour Review, (,1972), p. 421.

[2]Kim Jae Won, "Capital Imports and Economic Growth", (Seoul: Korea Development Institute draft report, June 1980), p. 33.

[3]Susumu Watanabe, "Sub-contracting, Industrialisation and Employment Creation", International Labour Review, (,1971), p. 60.

[4]Caves and Uekusa, p. 112.

Source: Leroy, P. Jones: "Jae-bul and the concentration of economic power in Korean development: Issues, evidence and alternatives", Consultant Paper Series No. 12, KDI, 1980, p. 141.

6.8 Business organisations

In the section on Government the role of quasi-Government organisations, which might in this section be called quasi-private organisations was discussed. The two most powerful purely private organisations are the Korea Chamber of Commerce and Industry and the Federation of Korean Industry. The former, dating back to the 1880s came into its present form in 1952. There are 42 local chambers of commerce, and it is claimed that it represents over 500,000 firms in all lines of business. The 1952 law states that the KCCI is "to develop a well coordinated commerce and industry; to protect and promote the interests of those who are engaged in business and to strengthen international economic relations. The FKI represents the 500 largest firms in the Republic of Korea and puts the case of big business. Both are fully private institutions, conducting their own policy research and capable of speaking out against the Government policy on occasion.

Small and Medium Industry is represented by the Korean Federation of Small Business with 16,000 member firms grouped into nearly 200 cooperatives. KFSB has far fewer resources, located in a small buiding in a backstreet in Seoul. It is much more closely linked to MCI with an interchange of personnel.

6.9 The future of Korean enterprise

Korean enterprise in the early 1980s presents a variety which is hard to evaluate. It is universally dependent on credit, with most sectors reporting low profits. There is a considerable potential for improved management, accounting and cost-cutting. There is good evidence to suppose that companies have been pursuing these lines during the recession, though smaller and less well managed firms urgently need technical and managerial advice.

Foreign businessmen point to extremely efficient operations by any standard in both small and medium industry and particularly in large industry. In an increasingly complicated world, with tight markets, the chaebol offer a great opportunity for the Republic of Korea to advance its technology. But they also present a problem in that they may need to import technology which reduces labour requirements rapidly leading to technological unemployment. This is an issue to which a section of Chapter V will be devoted. The second problem is that they are on the verge of becoming true

multinationals. First Korean factories are being built abroad in the United States and Portugal and Korean companies are beginning to subcontract in other countries where labour costs are lower. They may also prefer to operate in countries where Government intervention is less all-pervasive. Can the motive force of the creative nationalistic desire to see the Republic of Korea developed rather than mere profit be transmitted in such companies? And if it can, for how long?

7. Workers and labour markets

On no issues are both Koreans and foreigners more divided than the condition of manufacturing workers. For the conventional view of Korean development in which labour is merely a factor of production, the Republic of Korea's human capital is the key to the favourable conditions which permitted successful labour-intensive export-led growth. Moreover because of the high value placed on education "the large investment in human capital has yielded a highly skilled labour force obtained without great expenditure of public resources".[130]

For those critics for whom the entire Korean experience has been a sham "it is clear, however, that the sufferings of the working (and unemployed) masses are mounting and that repression is increasingly necessary to contain this discontent.[131] If the latter view did not have so much support amongst Korean students and workers, it would be possible to dismiss it as a cry of Marxist anguish that the world was not proceeding in a dialectical and materialist fashion.[132]

Particularly from the point of view of countries wishing to adopt some part of the Korean strategy it is urgently necessary to know whether there is any objective truth in this view, and if not, why it is so widely believed in the Republic of Korea.

There can be little doubt that most workers have benefitted immensely from the growth of the Korean economy since 1961. The question is whether workers in the export sectors have been exploited, and the rest of the country has grown rich as a result? A review of the overall statistics helps to pinpoint the issues. Critics of the Republic of Korea tend to forget the general context in which the Korean economy operates. Korea in 1960 was a

country whose population was rising at approaching 3 per cent annually and although the rate of population growth has now fallen to around 1.5 per cent to 1.6 per cent per annum, the supply of labour is still growing as the children of the early sixties enter the labour market reaching 3 per cent per annum in the 1980s. Therefore merely to contain unemployment at its existing level, jobs have had to grow historically at about 300,000 per annum, and in the 1980s must grow at the rate of 500,000 per annum.

As Table 3.16 shows in 1963, 16.2 per cent of the population were un-, or underemployed. Moreover a further 20.7 per cent of the population were unwaged family workers.[133] By the end of the First Plan unemployment had dropped only slightly to 15.3 per cent, although the economically active population had risen by 18 per cent. In 1965 it was estimated that Seoul unemployment still stood at 23 per cent.[134] At this stage the incremental increase in industry was still too small to have any significant effect on unemployment. However despite the rural depression during the second plan period, by 1971, the un- and underemployed rate had fallen to 9.2 per cent, although the labour force had increased by 13.4 per cent.

During the Third Plan as the post-war baby boom began to affect the labour market, the labour force increased by 18.9 per cent, but un- and underemployment dropped to 5.2 per cent. Moreover the workings of the labour market suggest that by 1976 most of those working 18 hours and less included many who worked part-time by choice, such as housewives and students. However the share of family workers in the labour force had actually increased, to 25 per cent, and as Table 3.17 shows, only 23.6 per cent of the labour force was in regular employment with long term contracts.

The question therefore arises as to whether the process was "labour absorption" rather than employment creation, with so called "spongy" sectors, agriculture and certain services absorbing surplus labour often in the form of unwaged family labour. In 1973 Ranis cited the Republic of Korea as an example of a developing country in which the industrial sector had the ability "to efficiently absorb unemployment or underemployed labour in the course of the development process". He argued that the Republic of Korea's choice of technology was "capital stretching" and highly labour intensive.[134] Neither econometric exercises nor empirical surveys validated

this hypothesis. Oshima's survey of Asian capital/labour coefficients showed that the Republic of Korea differed little during the 1960s from other Asian countries, and that Thailand had a more efficient use of capital and West Malaysia the same.[135] Singapore however had a significantly higher capital labour ratio. Were figures available for export and domestic sector labour intensive industries, the Korean export sector would almost certainly have more capital per capita than domestic sectors.

The export sectors certainly used labour more efficiently than the domestic sector as the Republic of Korea developed, because the export sector was a price taker, whereas much of domestic industry was a price giver. To stay competitive export industries had to use labour more economically as real wages rose, while the domestic industries could pass the price on to the consumer, and indeed had so little access to capital that even if a capital/labour isoquant existed, domestic industry could rarely substitute capital for labour.[136] There is considerable anecdotal evidence to suggest that while initial exports may have been made by companies using a lot of labour, efficient enterprises within each export sector rapidly modernised their operations with capital available for export industries, and became less labour intensive.

Since 1976 the maturity of the labour market has increased. By 1979, 29 per cent of the labour force were regularly employed. But 52.3% of all economically active Koreans were still either self-employed or family workers. Unemployment fell to 3.2 per cent in the boom year of 1978 (4.2 per cent including underemployment), but rose slightly to 3.8 per cent (5.0 per cent) in 1979 and to 5.2 per cent (5.7 per cent) in 1980, or in real terms 749,000 people.[137] Throughout the period of rapid growth to 1978 unemployment as a percentage of the economically active population has never reversed its fall (underemployment rose slightly in 1972 and in 1975 and 1977).

This in itself is a major achievement. Moreover the economic participation rate has risen slightly from 55.3 per cent to 58 per cent in 1978, no mean achievement when it is considered that employment was rapidly changing its character from a predominantly rural one, which in a country based on peasant holdings will always produce a high participation rate, to one in which urban dwellers predominate.[138] In recent years the farm household participation rate has been about 63 per cent of adults 14 and over,

Table 3.16 Economically active population

In thousand persons

	14 歲 以 上 人 口 Population 14 years old and over	經濟活動人口 Economically active population			非經濟活動人口 Non-economically active population	18時間未滿就業者 Less than 18 hours employed	經濟活動參加率(%) Labor force participation rate	失業率(%) Unemployment rate
			就業者 Employed	失業者 Unemployed				
1962	-	-	-	-	-	-	-	-
1963	15 085	8 343	7 662	681	6 742	667	55.3	8.2
1964	15 502	8 449	7 799	650	7 053	725	54.5	7.7
1965	15 937	8 859	8 206	653	7 078	645	55.6	7.4
1966	16 367	9 071	8 423	648	7 296	740	55.4	7.1
1967	16 764	9 295	8 717	578	7 469	617	55.4	6.2
1968	17 166	9 647	9 155	492	7 519	497	56.2	5.1
1969	17 639	9 888	9 414	474	7 751	321	56.1	4.8
1970	18 253	10 195	9 745	454	8 054	483	55.9	4.5
1971	18 984	10 542	10 066	476	8 442	490	55.5	4.5
1972	19 724	11 058	10 559	499	8 666	555	56.1	4.5
1973	20 438	11 600	11 139	461	8 838	425	56.8	4.0
1974	21 148	12 080	11 586	494	9 068	235	57.1	4.1
1975	21 833	12 340	11 830	510	9 493	299	56.5	4.1
1976	22 549	13 061	12 556	505	9 488	223	57.9	3.9
1977	23 336	13 440	12 929	511	9 896	281	57.6	3.8
1978	24 024	13 932	13 490	442	10 092	140	58.0	3.2
1979	24 678	14 206	13 664	542	10 472	163	57.6	3.8
1980	25 335	14 454	13 706	749	10 881	81	57.1	5.2
1981	25 969	14 710	14 048	661	11 260	62	56.6	4.5

資料：經濟企劃院

Source: EPB, Major Statistics of the Korean Economy 1982, Seoul, 1983, p. 17.

Table 3.17 Employment by classification

In Thousand Persons

	Total	Self - Employed	Family Worker	Regular Employed	Temporary Employed	Daily Worker
1963	7,662	2,854	2,395	942	493	974
1964	7,799	2,887	2,523	926	594	870
1965	8,206	3,019	2,552	1,100	682	853
1966	8,423	3,047	2,587	1,266	625	918
1967	8,717	3,158	2,490	1,502	615	952
1968	9,155	3,216	2,508	1,790	595	1,046
1969	9,414	3,284	2,544	2,035	522	1,029
1970	9,745	3,331	2,628	2,236	520	1,030
1971	10,066	3,440	2,669	2,323	577	1,057
1972	10,559	3,617	2,683	2,238	652	1,169
1973	11,139	3,848	3,080	2,089	943	1,179
1974	11,586	4,010	3,069	2,450	945	1,112
1975	11,830	4,012	3,016	2,597	1,074	1,132
1976	12,556	4,263	3,096	2,965	1,086	1,146
1977	12,929	4,291	2,874	3,302	1,030	1,432
1978	13,490	4,448	2,749	3,802	1,033	1,458
1979	13,664	4,573	2,572	3,983	1,111	1,425
1980						

Source: MOL: Yearbook of Labour Statistics 1981, Seoul 1981.

73 per cent for males and 53 per cent for women. The non-farm household participation rate is about 54 per cent, 74 per cent for males and 35 per cent for women.

With 32.5 per cent of the labour force still in agriculture in 1981, the Republic of Korea is still far from having a developed country's labour structure, although the percentage of GNP derived from agriculture is approaching that of several developed countries in the early 1960s. The agricultural sector is a major factor in the fluctuations in the labour supply noted in Chapter II. Within the agricultural sector, family labour is responsible for most of the fluctuation as would be expected. Indeed because of the growing labour shortages in the countryside, hired labour has declined and more family labour used.

The degree of interaction between the agricultural sector and the rest of the economy has been underinvestigated. The peak in non-farm household employment in many years coincided with the peak in farm household employment. Whereas the peak in farm households is in family labour, that in non-farm households is in daily labour. Cases of urban workers taking temporary agricultural jobs can certainly be found, but does this explain the whole fluctuation in non-farm households? Self-employment and family labour remained high in both manufacturing (still 20 per cent in 1977) and in the service sector where the percentage of self-employed remained almost constant.[139]

If there are doubts about the rate of unemployment, and if the participation rate fluctuates more each year than it has between 1963 and 1979, there is no doubt that there has been a change in the age composition of the labour force out of proportion to the changing demographic structure of the population.

Fourteen year olds have declined from 1.3 per cent of the labour force to 0.45 per cent, and 15-19 year olds from 12.9 per cent to 8.6 per cent, reflecting a much higher proportion of adolescents at school. On the other hand, those in the age between 20 and 24 has risen from 11.9 per cent to 12.9 per cent (14 per cent for women in 1967 to 17.9 per cent in 1980), while those between 25 and 29 has dropped, those between 30 and 34 remained almost constant, 35 to 49 increased slightly and those between 55 and 59 and above 60 have increased from 4.5 per cent and 5.6 per cent, reflecting larger cohorts in these age groups.

In general the balance has shifted slightly, but decisively towards an older, better educated and presumably more experienced and therefore more productive, labour force. The change appears to have been most apparent between 1972 and 1976 when working 14-19 year olds began to fall in absolute, as well as proportionate numbers. Whereas in 1966 54.1 per cent of primary school graduates went on to middle school, as table 3.22 shows, by 1979, 93.4 per cent of those leaving primary school went on to middle school. Of middle school graduates 65.7 per cent went on to high school in 1966, and 81 per cent in 1979. Thus by 1979 a lower percentage of the age group were leaving school at 15 than in the U.K.

As a result the Korean labour force has continued to enhance its major characteristic, its general level of education. However it has been pointed out by Hans Singer that while the quantity of education supplied has risen, there has been little improvement in the quality, and in terms of class size and pupil teacher ratios, middle schools in particular have deteriorated.

Table 3.18 gives the critical statistics. In the context of good education, a class size of 59 is far too large at high school level, and reinforces the traditional nature of Korean education which is learning by rote, and actually discourages the use of initiative and creative thinking.

The type of education which Korean children receive is undoubtedly conducive to the production of an efficient and well qualified labour force, but it is questionable whether it is the most efficient way of producing such docile labour force, which is generally produced by military training in about three to six months. Nor do such conformists necessarily make good managers or higher grade workers.

Nor do these figures reflect the strain which the necessity of financing children through the education system places on families at the lower income groups, since all education after primary school is fee paying. It is obvious from estimates of the cost of education that a household with an income half the average and two children at high school would be spending 42 per cent of its income on education. National Korean data suggests that households are spending more on education in the countryside, but that urban households may not be able to afford to pay for as much education.[140]

Table 3.18 Entry rates to various trends of education

	國民學校 Primary school			中學校 Middle school			高等學校 High school				
	就學率	學生/學級	學生/教師	進學率	學生/學級	學生/教師	進學率	人文 General		實業 Vocational	
	Entrance rate (%)	Student / class	Student / teacher	Entrance rate (%)	Student / class	Student / teacher	Entrance rate (%)	學生/學級 Student /class	學生/教師 Student /teacher	學生/學級 Student /class	學生/教師 Student /teacher
1962	...	62.9	60.0	...	60.1	40.5	70.4	59.1	31.6	51.2	26.2
1963	...	65.2	61.3	49.9	60.6	39.3	68.2	59.6	32.2	53.5	27.6
1964	...	66.2	62.6	49.5	60.0	38.4	68.2	60.0	32.9	54.0	27.9
1965	95.1	65.4	62.4	54.3	60.7	39.4	69.1	59.8	32.2	53.5	27.7
1966	94.5	65.2	60.8	54.1	61.4	41.5	69.7	59.6	32.9	52.4	26.8
1967	96.7	64.8	60.3	58.0	61.3	42.1	70.1	60.0	32.6	52.2	25.1
1968	96.3	66.6	60.0	58.6	60.9	41.4	68.6	59.4	32.3	53.3	25.3
1969	96.7	62.8	58.4	61.8	61.2	41.8	70.1	59.4	31.4	54.6	26.3
1970	97.0	62.1	56.9	66.0	62.1	42.3	70.1	60.1	32.0	56.1	27.9
1971	97.6	61.3	56.0	69.6	63.8	42.6	69.4	60.2	31.5	56.7	26.7
1972	97.5	59.8	54.7	71.0	63.9	42.3	67.2	60.7	32.0	57.0	27.8
1973	98.1	58.2	53.1	70.7	64.0	42.5	68.1	60.9	31.8	57.3	28.7
1974	97.5	57.3	52.3	73.9	64.5	43.1	67.6	60.6	30.2	57.3	32.2
1975	97.3	56.7	51.8	77.2	64.5	43.2	74.7	59.8	31.7	57.0	31.0
1976	97.0	55.0	50.2	79.5	64.8	44.0	75.5	59.2	33.2	56.9	30.7
1977	97.6	53.2	48.8	84.5	65.2	44.6	76.8	59.0	33.0	57.3	31.3
1978	98.1	52.0	48.6	89.7	65.5	45.0	79.3	59.5	33.4	58.5	31.9
1979	98.9	52.2	48.1	93.4	65.7	45.3	81.0	59.8	33.6	59.1	32.0
1980	97.9	51.5	47.5	95.7	65.5	45.1	84.5	59.9	33.9	59.6	32.6
1981	98.4	49.8	45.5	96.5	64.9	46.9	86.5	59.6	33.8	58.4	31.9

Source: EPB: Major Statistice of the Korean Economy, 1982, Seoul, 1983. p. 252.

In terms of this burden, the proposal to provide free education to all middle school children by 1985, and the various measures which have relieved low income groups from education fees in the past four years have been a major step towards equity in a country so conscious of education qualifications.[141]

However it may be said that the Republic of Korea has a classic case of the diploma disease, in which education qualification has replaced ability.[142] Where the two are coterminous no harm has been done, but Korean industry and services are full of men of talent whose promotion is blocked because they were born too early or of too poor a family to permit further advancement, while young men with no practical experience are pushed into high levels of management.

It is commonplace also to find university graduates performing menial clerical jobs which in other countries would be performed by 16 year old girls. Koreans themselves have been forced to recognise this, and during the recent recession many employers have begun to hire female high school graduates for white collar jobs where previously they had employed male college graduates. There is little doubt that employment opportunities have replaced the Confucian desire as a major impulse to learning in many areas of Korean life. For instance, the opening of a new factory in rural Kyonggi-do by a major company which would only employ middle school graduates led to an immediate increase in enrollments in the local girls' middle school. Such instances could be multiplied.

The rising demand for education assisted Korean development considerably from the point of view of unemployment. Prolonged education, especially for men, meant that the impact of the population explosion after the Korean war on the labour market was delayed. Consequently increased employment opportunities were available when the post-war generations reached the employment market. However this was a once and for all shift which meant that the supply of labour actually increased in the latter 1970s, just as the economy was slowing down. Considerable doubt must hang over the unemployment data for the last four years as regards young people who have never had jobs being classed as economically inactive and not as unemployed.[144]

Imperfections of the labour market also mean that many well educated people do not get a job commensurate with their educational standard, as well as many intelligent undereducated people not getting jobs commensurate with their talent. In 1978, 30 per cent (44.3 per cent, 1979) of high school graduates went on to further education, 11.7 per cent (16.9 per cent, 1979) entered employment, but 26 per cent (37.8 per cent, 1979) were unemployed (the remaining 32 per cent's position was unknown by the school). High school graduates from vocational high schools found employment more easily. Only 11.3 per cent went on to further education, but 71.3 per cent found employment and only 16.5 per cent were unemployed.[144]

This in itself suggests that vocational training was more acceptable to employers. Amongst high school graduates, only 25 per cent from general high schools went into manufacturing, compared with 45.3 per cent from vocational high schools. Of those entering industry, 79 per cent of general high school graduates and 84 per cent of vocational high school graduates became production workers, a position one would have thought their education made them over qualified for.[145] From the point of view of reward the most glaring problem is that of sex differentials in which a junior college female graduate in production work will receive an average wage 20 per cent below that received by a male worker with only a middle school education.

On the whole it might even be argued that there was over-investment in more than basic education. This can be deduced from studies of estimated rates of return to investment in education as in Table 3.19 or from a study of wage differentials, as shown in Table 3.20 where it can be seen that production workers wages have consistently risen faster than those of professional, technical and managerial workers on a five yearly basis, though in individual years the trend has been reversed.[146] This suggests that it has actually been harder to recruit unskilled workers than skilled workers. This tends to confirm the rates of return as being much lower for education above middle school, and certainly below the rate of return on physical capital, or returns on education in other countries.[147]

Table 3.19 Estimated rates of return to investment in education

	Kwang Suk Kim (1968)	John Chang (for 1967) Adjusted for Unemployment	John Chang (for 1967) Unadjusted	Chang Young Jeong (for 1971)
Middle School	12.0	20.0	26.5	8.2
High School	9.0	11.0	13.5	14.6
College	5.0	9.5	9.5	9.3

Source: From McGinn etc. al, Education and Income Distribution, p. 178

Table 3.20 Wage Increase Rates

	Production worker	Professional, Technical Managerial worker
1965-1970	12.8%	6.6%
1970-1974	7.1%	6.1%
1975-1979	16.8%	15.3%

Source: Bai Moo-gi: "The Turning Point in the Korean Economy", Table A3.

7.1 The structure of the labour market

This failure of differentials to widen in a society which places such a high value on education requires some explanation. While in part this might be explained by an oversupply of graduates, itself produced by social values, this does not explain why, in an economy where a surplus of labour existed at least until 1975, production workers' wages kept pace with not only managerial wages, but actually narrowed the differential.

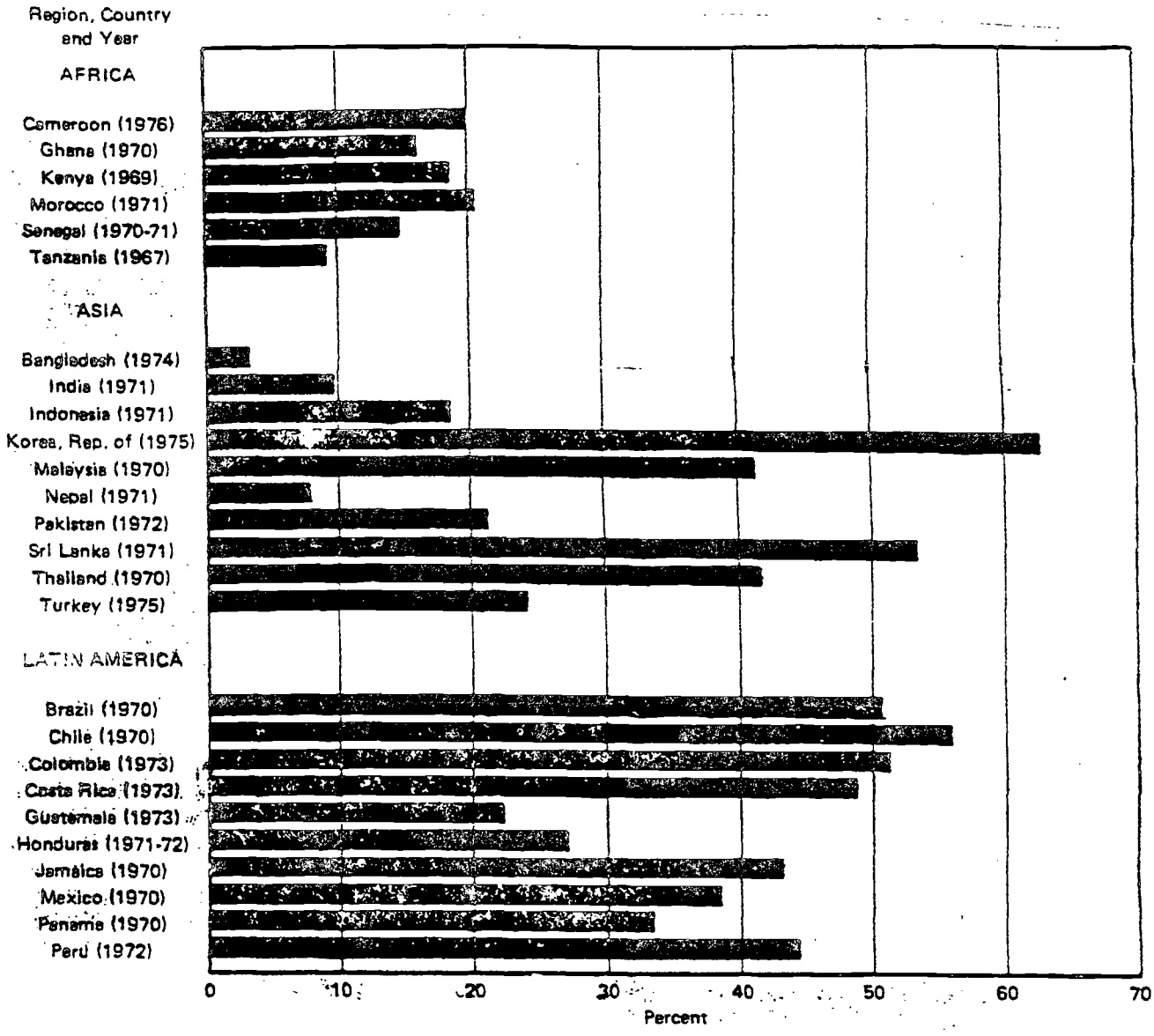
One explanation may be found in the interplay between the service sector and manufacturing and the fact that labour is a highly differentiated product for which different demand schedules exist. For most labour intensive industries the employers prefer a homogenous and docile labour force, best suited to mass production. These were unmarried girls with at least middle school education in the 16-25 age group. This is a finite cohort of less than 1.5 million.[148] By 1976 the demands of the textile and electronics industries alone accounted for two thirds of this figure, and from the early 1970s had begun to reach the effective limits of this cohort.

But this was also the type of worker required by the service sector where wages and higher education were less important. Although many jobs in the service sector, while paying twice the industrial wage, were considered degrading, for instance bus girls and bar girls, many others paid 50 per cent more and were socially acceptable.[149] This demand had social repercussions. As Figure 3.4 shows the percentage of girls under 25 who are unmarried is the highest in the world, followed closely by several other east Asian countries with a similar social/industrial structure.

Girls are preferred not only because this discipline is better, but because female production wages are on average almost exactly 50 per cent of male wages.[150] There is little evidence that women workers are less productive than men, and it is therefore much more profitable to employ women.[151]

Bai Moo-gi's analysis of the differential movement of wages reproduced shows that the differential between textile wages and male agricultural wages fell while wages in traditional manufacturing (manufacturers with 5-9 employees) and womens' agricultural wages suffered from an increasing differential.

Figure 3.4 Percent single among women 20 to 24 years old



Source: U.S. Dept. of Commerce: Bureau of Census: Illustrative Statistics of Women in Selected Developing Countries, Washington D.C. 1977.

This was possible because agriculture and traditional manufacturing was turning to less preferred labour, older married women who would previously not have been employed. Gijsbert van Liemt traces this process of a downward shift from the most preferred labour to less preferred labour in the fruit processing industry.[152] On the other hand other employers could still afford to switch from male to prime female labour because of the male-female differential. One class of employer to do this universally in the late 1960s was the bus companies replacing bus boys with bus girls.

The same process is illustrated by the way the gap between very small companies' wages and other textile companies widened more and more in the 1970s, while the gap between medium and large companies closed. Small companies could no longer afford to employ prime female workers, whereas medium companies were forced to raise their wages to keep up with larger companies. But as long as a gap existed between large and medium companies why did large enterprises continue to raise wages? Chiefly because wages remained higher for easier work in the service sector.[153]

These pressures forced companies to use labour more efficiently and raise labour productivity, as had been noted earlier. They could then in turn afford higher wages.

The above description assumes perfect market information on the part of Korean workers. Nothing could be further from the truth, and this brings in a secondary structure in the labour market. A survey of 2,485 workers conducted by the Korea Employers Federation revealed that 70 per cent of workers found their jobs through friends or relatives.[154] Although a primitive public employment service exists only about 1.1 per cent of employees in 1980 found their jobs in this way. According to the Ministry of Labour 51 per cent of new workers in industry found their jobs through friends.[155]

Interviews of workers suggested strongly that in the case of both migrants and Seoul residents, the choice of first job was largely haphazard, depending on contacts and might be in manufacturing or in any part of the service sector.[157] However once established they would learn of better jobs and move rapidly upwards, often one worker from a firm moving and then telling his or her workmate of the new position. This upward mobility within a given sector was confirmed by Bai Moo-ki's study of 1977.[157]

It is notable that manufacturing industry has the highest labour turnover rate of any employment group, although it must be noted from the differential between employment and separation rate that employers use this high turnover to adjust to business conditions. Thus if the survey is accurate in 1970, 71, 74 and 1980, workers leaving were not all replaced. Nevertheless the notion of the manufacturing industry of a nation being run with an annual turnover of between 52 and 72 per cent of the workforce is quite remarkable (Appendix Table 11). Ministry of Labour figures for duration of service suggest that the same 33 per cent of workers turn over every year and the remaining 66 per cent are much more stable.

A second factor in high mobility is the Confucian injunction against arguing with a superior. While attitudes may be changing slowly, they are reinforced by the educational system, and most employees would rather leave the company than argue. This process, which has also been observed in Hong Kong, of arguing with one's feet causes a very high mobility.[158] A major cause is the absolute prohibition of directly asking the employer what the wage will be before signing on. Incredible as this may be to a Westerner it is standard practice, resulting in a high mobility after the first month's employment. Obviously if over half the employees get their job through friends they will already have discovered the wage being paid, though outside well run or unionised establishments it allows employers to adjust wages downwards if business is bad.

Given the structured wage system between firms of different sizes, why do large companies pay more than medium sized companies? A profit maximising management might pay no more than the marginal product of the medium sized firm. It is important to understand that most Korean employers are also bound by non-economic behaviour of both status and paternalism implicit in Confucian society. Although the founder of Samsung, Lee Byong-chull is reported to have said that no union will ever be established in one of his factories "until the earth stops his eyes", wages paid in many Samsung enterprises are among the best in the industry and general worker facilities are good.[159] There are considerations of prestige in wishing to appear the best employer and thus enhance the public reputation of Samsung as well as develop a special loyalty among Samsung employees.

All major companies attempt to foster a corporate image with a high degree of loyalty to the company. Executives of Samsung firms believe that they have built up a much more stable workforce than most enterprises particularly at the managerial level. But those interviewed emphasised that loyalty to the immediate superior was stronger than to the company, and that if he left the company they might well follow.[160] Both the Government though the Factory Saemaul Movement and the Korean Employers Federation have tried to foster this paternalistic concept of the Confucian employer with apparent success. This leads to a wide range of employee fringe benefits which make calculation of the real wage more difficult, these include dormitories, meals, bonuses, night classes etc. Many of these are however of maximum benefit to unmarried employees.

The remarkable thing about the Korean system has been that according to official figures, without the ability of labour to organise freely since the Declaration of a State of Emergency on December 6, 1971 suspending the Labour Dispute Adjustment Law, real wages on average have risen by about the same level as labour productivity in electricity, gas and water. Table 3.21 shows that decadal averages do not reflect annual growth, and wages have tended to grow very unevenly, whereas productivity has grown smoothly. Presumably this gives employers windfall gains at the bottom of a wage cycle, which are then redistributed in years of fast wage growth.

This is undoubtedly the result of high labour mobility and the whole system of labour mobility depends for its success on the coexistence of a wide range of employment opportunities in one geographical location. Obviously this is most true of Seoul and surrounding region, and Pusan. Only in very large and very dense cities can the face to face job information network still give a large enough range of options.

In smaller cities, the situation concerning employment is much less favourable. Appendix Table 12, although at a high level of aggregation shows that wages were 16 per cent above the national average in Seoul, and frequently even higher in Kangwon-do (because of the concentration of miners who are higher paid and industries employing primarily males) and lower than the national average in every other province except Cheju-do (after 1977, presumable

Table 3.21 Productivity, money and real wages

1975 = 100

	製造業 Manufacturing					
	労働生産性 Labor Productivity		名目賃金 Nominal Wages		実質賃金 Real Wages	
	指数 Index	増加率 Growth Rate	指数 Index	増加率 Growth Rate	指数 Index	増加率 Growth Rate
1970	62.0		37.3		75.9	
1971	68.0	9.7	43.3	16.1	77.7	2.4
1972	73.9	8.7	49.3	13.9	79.3	2.1
1973	80.4	8.8	58.2	18.1	90.6	14.2
1974	89.6	11.4	78.7	35.2	98.6	8.8
1975	100.5	11.6	100.0	27.1	100.0	1.4
1976	107.5	7.5	134.7	34.7	116.8	16.8
1977	118.7	10.4	180.2	33.8	141.9	21.5
1978	132.9	12.0	242.1	34.4	166.6	17.4
1979	153.9	15.8	311.4	28.6	181.2	8.7
70-79		10.6		26.6		10.2

Source: EPB: Handbook of the Korean Economy 1980, Seoul 1980

because of the growth of tourism) and Kyongsang Namdo (between 1974 and 1978 presumably due to heavy industries predominating). However in major estate areas such as Kumi and Pohang the growth of industry had exceeded the local labour market, and consequently have to offer higher wages to induce workers to come and work.[161] Among executives salaries are normally higher than for the same job in Seoul.[162]

In the national wage statistics which are used to compare with productivity and price increases one might assume a normal distribution curve. In the absence of any evidence to suppose that the curve is skewed to the right, then 49 per cent of workers could have failed to keep up with the official price index. Secondly there are good reasons to suppose the curve may be skewed to the left, with higher than average wage increases in large and medium industries and those requiring skilled labour such as shipbuilding, and various heavy and chemical industries where major labour shortages for male workers began to emerge after 1976.

There are also good reasons for questioning whether the consumer price index reflects the basket of commodities bought by workers. In 1978 both employees and employers were convinced that inflation was actually running at 30-40 per cent and the average round of wage increases (without industrial disputes) was 34 per cent.[164]

7.2 Legislation and organisation

Modern labour legislation dates from the period of the American Military Government which introduced measures (based on those imposed on Japan) which were in turn based on Western standards. There are four basic laws, all enacted in 1953 based on ordinances of the American Military Government.

They may be briefly summarised as follows.

a) The Labour Standards Law which provides a bill of rights for all workers, specifying wages, work hours, special protection for women and minors, industrial safety and labour inspection. The degree to which these laws are observed is perhaps best indicated by the frequent attempts in political circles and by business organisations to modify the laws to "comply with the actual economic conditions of the country". The impartiality of the Government is best seen in its refusal before 1980 to modify these laws.

b) The Labour Union Law which sets the conditions under which unions shall operate, amended in 1974 and totally revised in 1980. The law defined unions, gave them a measure of legal protection and gave the Government considerable powers in policing the unions. The law requires for instance "the union to report all official decisions of the union to the Government. As in the case of the union constitution, also in case a decision of a labour union violates a law of order concerning labour, or is considered likely to harm public interests, the Government has the right to order the union to change its decision or make the decision null and void".[165] The law sets down the conditions under which collective bargaining may take place, and offers protection to workers who cannot be dismissed for belonging to a union.

c) Labour Disputes Adjustment Law which sets out how disputes shall be settled if collective bargaining fails. Essentially this is administered by the Labour Committees operating at central and local levels. If a labour dispute occurs the local committee will investigate, but either side may appeal to the national committee. The committee consists of three labour officials, three employers and three to five representing the public interest who have most of the power. In the case of a dispute the Labour Committee must rule on its legality within five days, and then a cooling off period of 20 days in which the union must take a vote of confidence while the Labour Committee mediates. After 20 days a strike or lock out may proceed. But either party may request arbitration which prevents a strike for another 20 days. If however the industry is classed as in the public interest, the Director General of the Office of Labour Affairs may intervene. The President may designate any industry as vital to the public interest and under the Yushin system all export industries were so classed. In this case Government arbitration was compulsory. As Professor Park states "even in private industry, therefore, the Labour Dispute Adjustment Law bars the parties involved in the dispute from going into actual dispute actions (strike or lockout) for nearly 100 days from the date the dispute has been verified by the Labour Committee".[166]

d) The Labour Committee Law which set up the Labour Committee.

e) Other legislation, includes the Employment Security Law of 1961 which set up an employment service and standards for recruitment and hiring. Since 1981 this has become a much more important service. The Industrial Accident Compensation Insurance Law most recently amended in 1973 provides for comprehensive compensation for injury in firms with more than 30 employees.

f) New Labour Legislation of 1980-81. In 1980-81 there were major changes in the labour laws. These were partly a response to several strikes given great prominence in 1979-80, partly a concession to the employers' federation who wanted the law to make some concessions to "Korean conditions", partly a conceived necessity with the lifting of emergency decrees. Their shape was determined largely by a group of academics trained in labour economics in the U.S. The revised Labour Union Law prohibits individual unions at enterprise level from entrusting the right of collective bargaining to industrial labour organisations or other third parties. At the same time new legislation, the Labour-Management Council Law of December 1980 ordained that every enterprise employing more than 100 employees should have a labour management council.

The Labour Management Councils will also be represented by a Central Labour Management Council which "shall consist of members representing workers, employers and the public interests. Matters necessary for organisation and operation of the Central Committee shall be prescribed by the Presidential Decree".[167] Although in enterprises where a union branch is organised, the union will select the worker representatives (Article 6). This new structure is seen as a threat by the Labour Unions to undermine the entire Union structure.

It is too early to say how the new councils will function in practice. Government and employers appear to hope that the links between the national union organisations and their branches will be weakened, thus creating the Japanese situation with plant or house unions with only nominal affiliation to national organisations. The ability of different part of the administration to take quite opposing points of view described in the first section of this Chapter has heightened this uncertainty. The new Ministry of Labour Affairs (elevated to ministerial level in 1981 as a mark of how important the Government believes labour relations to be) has repeatedly assured Labour Unions that links between the branches and centre will not be weakened, but in the provinces the police and other Government agencies have apparently regarded union officers from the national organisation as "third parties" prescribed from intervening in industrial negotiations at plant level.

Other major amendments are to the Labour Standards Law prescribing a uniform rate of lump sum retirement allowance regardless of job type, and that the standard work hours of 8 hours per day and 48 hours per week may be extended by prior labour management agreement provided that the average in a

four week period does not exceed the limit. The Labour Committee Law states that the Ministry of Labour now has sole responsibility for operating and appointing the members of local labour committees.

7.3 Unions

The early history of Korean trade unionism is closely linked with the resistance movement to the Japanese. To counter the dominant left-wing tendency of post-liberation unions a right wing confederation of workers associations was formed in March 1946 under the title Federation of Korean Trade Unions. The older Chun Pyong (General Council of Korean Trade Unions) was banned by the American Military Government in March 1947. The FKTU gradually took on a more representative role through a period of division and fierce factional in-fighting. However from 1955, the FKTU was officially an organ of the ruling Liberal Party. The period was marked by the growth of small unions, so that by 1960 there were 321,097 workers in 914 unions. After the students revolution of April 1960 a new FKTU was formed, but in May 1961 all existing parties and unions were dissolved.[168]

In August 1961 a new structure was created based largely on the West German model. The major change was that the number of national unions remained very small, 14 in 1962 and 17 after 1970. Likewise the total membership did not surpass the level of 1960 until 1966 (see Table 3.22). By 1971 one million and ninety three thousand workers were members of unions, but this dropped in 1980 to 948,000. In 1979, approximately 20.8 per cent of workers in mining and manufacturing were members of unions, though this rises to 37 per cent of employees in establishments employing more than 20 workers. 7.5 per cent of service sector workers were unionised.

The Union influence lies largely through Government uncertainty about how workers perceive the Korean development process. While union leaders are easy to observe and persuade or disuade and individual activists can be blacklisted, labour unrest can errupt at any time in any plant. The chief causes of labour unrest stem from employers' practices. Therefore most of the Ministry of Labour's time is taken with putting pressure on employers to behave in a way which is unlikely to lead to labour disputes. This has led the Korea Employer's Association to see the Government as tending to side with labour. Unions naturally see things differently since they experience mediation in disputes which rarely meets all their claims, and continual

Table 3.22 Unions and union membership

Year	Union	Union		Union Membership		
		Local Chapters	Branches	Total	Male	Female
1963	16	313	1,820	224,420	174,222	50,198
1964	16	341	2,105	271,579	211,144	60,435
1965	16	362	2,255	301,523	235,491	66,032
1966	16	359	2,359	336,974	250,491	76,318
1967	16	386	2,619	377,576	286,576	91.006
1968	16	385	2,732	412,906	309,876	103.030
1969	16	417	2,939	444,783	323,317	121,466
1970	17	415	3,063	473,255	357,881	115,378
1971	17	446	3m061	497,221	372,575	124,464
1972	17	430	2,961	515,292	380,805	134,487
1973	17	403	2,865	548,054	392,071	155,983
1974	17	432	3,352	655,785	463,132	192,653
1975	17	488	3,585	750,235	508,966	241,269
1976	17	517	3,854	845,630	559,486	286,144
1977	17	538	4,042	954,837	634,837	319,766
1978	17	552	4,305	1,054,608	696,865	357,747
1979	17	553	4,394	1,088,061	723,583	364,478
1980	16	2,618	-	948,134	566,368	381,766
Railway workers	1	12	-	32,734	31,506	1,228
Textile workers	1	308	-	158,121	29,939	12,182
Mining workers	1	112	-	54,610	52,847	1,763
Electric-power workers	1	45	-	16,229	15,749	480
Foreign institution wrkrs	1	27	-	19,669	17,183	2,486
Postal workers	1	11	-	46,740	24,808	21,932
Transport workers	1	25	-	40,994	38,557	2,397
Shipping workers	1	45	-	34,015	34,015	-
Financial inst. workers	1	55	-	58,272	35,052	23,220
Monopoly workers	1	14	-	13,109	9,489	3,616
Chemistry workers	1	270	-	157,833	93,111	64,722
Metal ind. workers	1	248	-	115,395	82,675	32,720
Federation workers	1	292	-	71,533	42,400	29,533
Publication workers	1	65	-	8,322	5,170	3,152
Auto transport workers	1	1,041	-	109,375	80,875	28,500
Tourist ind. workers	1	48	-	10,787	6,967	3,820

Source: MOL Yearbook of Labour Statistics, 1981.
Korea Statistical Yearbook, 1981.

interference from police and security organisations leading one distinguished foreign labour specialist to remark that the 1980 labour legislation would be a great advance if the Police were classed as a "third party" to a labour dispute. However Park Young-ki points out that policy or KCIA mediation was often preferred by both sides to the local labour committees.[169]

In January to April 1980, 719 cases of labour disputes were recorded. Of these 534 were caused by overdue wages, 26 by wage increase demands, 25 by opposition to suspension or closure of plant, and 33 by problems relating to labour unions. Some 511 cases reached the point of requests for official intervention, though 238 of these were settled before intervention began, 69 cases were mediated by the labour committees and 190 cases remained unsolved.[170] As the Korea Annual for 1980 noted, "only half of the business that suffered from labour disputes during the period (January to April 1980) was known to have organised labour unions, indicating that most of the disputes tended to erupt spontaneously rather than through any collective action".[171]

Between 1975 and 1979 over 50 per cent of labour disputes resulted from overdue wages. Uncertainty about the reliability of statistics for labour disputes makes it difficult to detect trends. Under the Emergency Decree of 1971 the Office of Labour ceased to publish figures on labour disputes, but continued to print the statistics of strikes prior to 1971. Since strikes were supposed not to exist statistics could not be compiled. However as the Chosun Ilbo noted in 1980 "In particular, the national security laws have already been losing their effectiveness. According to these laws, the labour unions can in no case resort to collective bargaining. Nevertheless, the Bureau of Labour is urging collective bargaining between labour and management and is displaying this kind of action as a fixed policy of labour administration. Therefore it appears that the Government is itself negating some of the effectiveness of these laws. And everywhere now workers are banding together in sitdown strikes and using force in strikes as was done in the Sabuk incident. These actions are taking place outside the reach of these laws and are evidence of their (the laws) limitations".[172]

However, when it is remembered that many employees choose to leave a company rather than pursue grievances, the position of labour relations remains an area in which all sides show concern.

One further anomaly should be noted in connection with disputes and high labour mobility. Under the Labour Standards Law employees leaving are entitled to separation pay amounting to a month's pay for every year worked. However if they are dismissed for misconduct then the employer is excused from making this payment. Hence in official statistics most of the labour turnover is classified as dismissal for misconduct.[173]

The Sabuk incident was one of the most violent in the eruption of labour unrest in 1980. The cause was the collusion of a labour leader with the mine owner. The Chosun Ilbo reflected that this represented a more general decline in the union movement "the Democratic Republican Park Government's suppression of labour unions under its "economic-development-first programme", and its suspension of two of the labour unions rights (collective bargaining and collective action) on the basis of national security laws, together with its enforcement of paternalistic labour-management relations. What has happened is that through such political and economic circumstances our present labour unions and labour movement have not been able to avoid a decline in their original significance and function. In such circumstances, moreover, would-be aristocrats among the labour management have put the miscalculated and weakened labour-union organisation to contrary uses and have patronised industry in their quest for personal gain and luxury. This doubt exploitation of the workers is the exceedingly sorry state of affairs created by such developments".[174]

During 1980 there was a widespread purging of union leaders at national and local level who were considered to either be in collusion with the Government or employers. In the case of the Sabuk mine union leader, his wages were paid by the mine owner without having to work, and the Chosun Ilbo believed that this was common practice throughout much of Korean industry and argued that labour leaders should either work or be supported by the contributions of union members. The extent to which the situation has altered under the new labour laws is unclear.

8. Employment, living standards and exports

Most important of all, and challenging the premise around which the whole ILO study is based is the fact that of all the occupational groups, the manufacturing average wage was consistently below the average wage for all occupations (Table 3.23), and was the only group below the national average.

Table 3.23 Average wage by occupation

In Won

	All Workers	Pro. Tech. Workers	Managerial Workers	Clerial Workers	Sales Workers	Services Workers	Farmers Wood-Outters Fishery Hunter and Related Workers	Production and related Workers
1971	22,441	40,362	60,792	34,017	20,242	15,523	15,445	17,516
1972	22,834 (1.8)	44,258 (9.7)	67,755 (11.5)	32,515 (-4.4)	24,113 (19.1)	16,603 (7.0)	17,031 (10.3)	18,386 (5.0)
1973	27,299 (19.6)	51,202 (15.7)	83,486 (23.2)	40,988 (26.1)	31,514 (30.7)	20,517 (23.6)	18,517 (8.7)	20,729 (12.7)
1974	36,034 (32.0)	59,692 (16.6)	98,511 (18.0)	54,095 (32.0)	34,845 (10.0)	26,343 (28.3)	23,497 (26.9)	28,874 (31.3)
1975	46,654 (29.5)	92,400 (54.8)	159,399 (61.8)	74,679 (38.1)	42,964 (23.3)	36,052 (36.1)	30,332 (29.1)	34,820 (20.0)
1976	64,308 (37.8)	136,004 (47.2)	220,958 (38.6)	103,668 (38.8)	52,319 (21.8)	47,865 (32.8)	40,123 (32.3)	46,639 (33.9)
1977	77,375 (20.3)	157,230 (15.6)	254,301 (15.1)	119,312 (15.1)	75,774 (44.8)	57,890 (20.9)	71,792 (78.9)	57,979 (24.3)
1978	104,132 (34.6)	211,487 (34.5)	338,227 (33.0)	142,219 (19.2)	98,375 (29.8)	77,259 (33.5)	81,972 (14.2)	78,434 (35.3)
1979	146,442 (40.3)	285,504 (35.0)	485,826 (43.6)	196,199 (38.0)	119,560 (21.5)	108,425 (40.3)	121,304 (48.0)	111,476 (42.1)

Source: EPB: Handbook of the Korean Economy 1980, 1983, p. 267.

Admittedly manufacturing improved from 79.7 per cent of the national average, to 84.9 per cent, but this was largely due to a levelling higher up. Manufacturing workers wages remained 26 per cent below the next occupational group in 1979, compared with 26 per cent in 1971.

How can this be explained? Largely because 40 per cent of the manufacturing labour force are female in 1980 (44.5 per cent according to the Ministry of Labour). Moreover in leading export products the percentage is much higher, 68 per cent in textiles, 77 per cent in clothing, 50 per cent in rubber shoes, 55 per cent in electronics and 55 per cent in other manufacturing. Female production workers receiving between 50 and 70 per cent of the wages of men performing the same job.

If equal wages had been paid for equal work, then either male wages would have had to drop drastically, or a substantial portion of the Republic of Korea's export industries might have ground to a halt. It is assumed that while women earned less than their marginal product, men probably earned more than their marginal product so that the aggregate wage bill was close to the marginal product of all employers in those industries where women formed a substantial part of the labour force, and not all of the benefits went to the employer. Certainly estimates of profits in such industries do not suggest a high profit ratio.[175] In new industries where men predominated such as shipbuilding, iron and steel, petro-chemical industries and vehicle manufacture the high wages paid to men in textiles and electronics encouraged a higher degree of efficiency in the use of labour, as noted in chapter II, than might otherwise have been the case.[176] Likewise the growing shortage of young women in preferred age cohorts encourged traditional export industries to improve their labour efficiency in the 1970s.

The precise workings of the labour market and their relationship with Korean economic development deserve closer study and international comparison with other economies with a similar industrial structure. The disorganised nature of the economy means that there are still many sectoral and regional pockets of high inefficiency. There are other firms whose survival depends on ignorant employees coming from the countryside, who will then move on after three to six months to higher wage sectors of the same industry.

It must be argued however that until reaching the Heavy and Chemical stage of development, the Republic of Korea's development in as far as it has relied on export led growth has been based not on an adequate supply of well educated labour, but on an adequate supply of well educated young females. However since eduation fees are identical for men and women, the rate of return to families educating a female has been approximately half that for a man. This going on the basis of figures in Table 3.24 is a very poor rate of return. What it represents is a considerable transfer from poorer households (since middle and upper class girls do not enter industry) to the nation in general.

Now it may not be unreasonable to ask for a sacrifice on behalf of national development by girls in the age group 16-25, but it is highly regressive to tax poorer families who pay to educate them. An extension of free eduation and perhaps an extension of non-pecuniary honours in recognition of this contribution of the young female labour force seems called for.

The Republic of Korea is widely recognised as being a country in which the distribution of income is reasonably equitably disputed. All calculations rest on the rural income survey and the urban income and expenditure survey. However non-farming households in the countryside, households in small towns, single person households and the very rich and the very poor in urban areas are excluded. As a consequence important sectors are left outside any survey from the point of view of income. Hence from the point of view of income distribution any estimates using the expenditure surveys will exclude segments of the population at thei high end of the scale and lower than average.[177]

Careful study by Dr. Choo of KDI has produced the following estimates of income distribution:

Table 3.24 Income distribution

	1965	1970	1975	1976	1978	1980
	(1)	(1)	(2)	(1)	(3)	(4)
Top 20%	41.81	41.62	47.2	45.34	46.7	
Middle 40%	38.84	38.75	38.3	37.81	37.9	
Bottom 40%	19.34	19.63	14.5	16.85	15.4	16.1

Source:

(1) Choo Hak-chung, Economic Growth and Income Distribution, 1978 Appendix 1;

(2) the data for 1975 is given by B. Renaud in his discussion paper Income Size Distribution by Province and City of Korea, but were never published;

(3) World Bank, World Development Report 1981;

(4) Fifth Five Year Economic Development Plan.

Whatever caution surrounds these figures, there is general agreement that during the 1960s Korean income distribution remained remarkably equitable, and indeed the share of the bottom decile increased from 1.32 to 2.13 per cent, presumably the result of unemployed or underemployed finding full time jobs. The 1970 result places the Republic of Korea in the category of low inequality in the framework of the authors of Redistribution with Growth.[178] Since 1970, the number of industrial workers has risen by 132 per cent, and the economy has become much more dependent on manufactured exports, but the country has slipped from low inequality to the bottom of the moderate inequality category.

What are the implications of this experience for export led growth? Most industrial workers lie within the bottom 40 per cent, and it will be noted that the middle 40 per cent have merely held their ground, while the top 20 per cent, and in particular the top 10 per cent, the senior managers and

owners of major enterprises who have increased their share of income. National income accounts and the failure of wage differentials to widen suggest that this loss of ground stems not from a failure of the labour market, but from a marked increase in income from property, chiefly from interest. The share of all forms of property (rents, interest and dividends) in national income has risen from 12.7 per cent in 1975 to 18.6 per cent in 1981. That this should occur after the so-called turning point in the labour market is disturbing.

However, the steepest rise in income from property has occurred 1979-81, indicating that the slowdown in the economy has affected real wages more than other incomes. Many Korean economists argue that an average growth rate of 6 per cent may be inadequate to reverse this trend without major redistributive measures. The Fifth Plan announces policies which will raise the share of the bottom 40 per cent to 17.5 per cent, admitting that "in spite of such development (the relative equality of income) the Republic of Korea's export-led, high growth development strategy of the past two decades has been attended by acute social problems including unfair economic opportunities, increasing inequality, income distribution, and the lack of provisions for the basic needs of the people. They have given rise to a sense of relative poverty among a large segment of the people and thus hindered the sustained growth of socio-economic development".[179]

The question is whether the policies announced will be adequate to alter the distribution of income. Dwight Perkins considered "Adelman and Robinson's study reinforces the view that the distribution of income is firmly rooted in the structure of the economy, and its path over time depends on the fundamental development strategy chosen by the society"..."Only a massive effort by the Government involving a wide variety of interventions in the economy would be likely to move Korean society signicantly further towards less inequality, at least in the short run".[180]

A second measure of Korean development is presented in figure 3.5 which shows the Engel coefficients of urban households by occupation.[181] The most notable improvement in standard of living occurred between 1965 and 1969, before the massive growth of export employment in the early 1970s. During the first half of the 1970s the Engel coefficient actually rose, as agricultural terms of trade improved, representing a transfer from urban dwellers to rural dwellers. Indeed in a recent article Choo Hakchung has argued that rural dwellers are better off than urban dwellers (a reversal of Korean

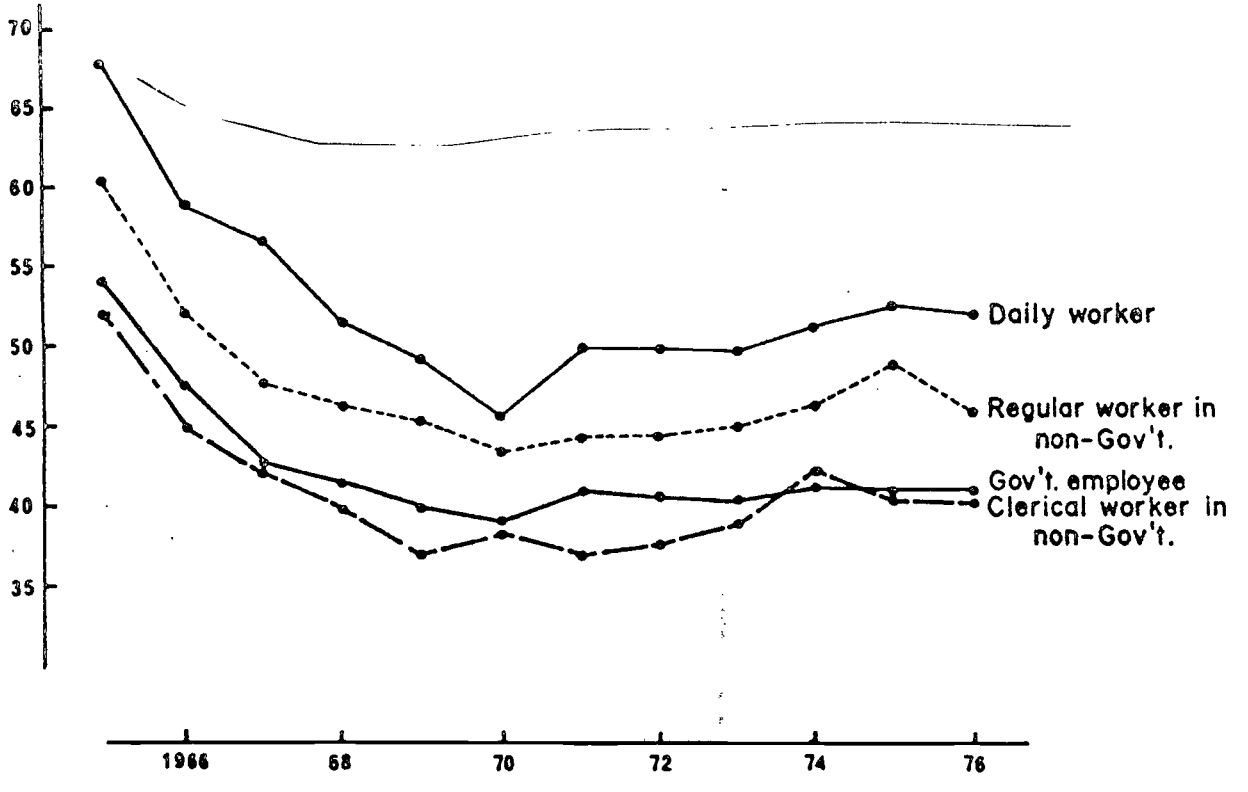
perception).[182] Unfortunately Figure 3.6 does not extend through 1977 and 1978, but appears to suggest the beginnings of a further period of improved standard of living for urban workers 1976-1979, which other evidence would suggest took place.

To conclude, about 50 per cent of the labour force are not yet part of the formal labour market because they are unwaged or self-employed. Those in regular employment at present number only 29 per cent, creating great difficulties for the enforcement of labour standards, and for the creation of social benefits based on employment.

The labour market operates in a peculiar way, apparently with a large reserve of labour which is only acceptable to employers at the bottom of the employment ladder, and with a high preference for girls between 16 and 25 in many industries. In general labour is probably over-qualified for the tasks it performs, though there are obvious shortages of certain skills, for instance welders.

Most groups in society have gained greatly from the development process, but there must remain a question mark over the condition of a large number of households, and this is confirmed by the worsening distribution of income. There is certainly no evidence that workers in export-oriented industries have been better off than the average, and it would appear that workers in most other occupations have gained more. One major reason for this is that exports are dominated by world prices and the competitiveness of Korean products, whereas most workers in the Republic of Korea are not in competitive occupations. To some extent this imbalance may call in question the exchange rate policies of the Government during the 1970s since it is export workers who must suffer most if the won is overvalued.[183]

Figure 3.5 The Engel coefficients of the urban employee households by the occupation of household head



Source: "Poverty in Asia I", The Philippine Economic Journal No. 43, Vol XIX, No. 1, 1980.

References

1. 1949 constitution. The wording remained unchanged through the revisions of 1962 and 1969. Chapter 4, Articles 111-118.

2. 1980 constitution, Chapter 9, Articles 120-128. The wording of the articles of the 1962 constitution were incorporated in the 1980 constitution without modification except for limited tolerance of the leasing of agricultural land.

3. Summary of the First Five Year Economic Development Plan, 1961, p. 28.

4. Korean Constitution, 1949, 1962, 1969, Article 117.

5. It might be objected that the new military leaders of the Republic of Korea did adopt a more laissez faire approach (by Korean standards). Many Koreans would be quick to point out that the change of Government in 1980 was inspired by a desire for stability in the political sphere, and not from a fundamental critique such as inspired Park and associates in 1961. However in practice after Chon Doo-whan became President on August 27 1980 a stream of economic orders with a high dirigiste impact emanated from the Economic sub-committee of the National Security Committee.

6. Lee Hahn Been: Korea Time Change and Administration, 1966, pp. 149-152.

7. Pak Tong-so: "The problem of Korean Higher Civil Servants: Their social backgrounds and morale" Some problems on public administration in developing countries, East-West Centre: Occasional Papers of Reserach Translations No. 13, 1966.

8. Report of the Oregon Advisory Mission, 1961, p.

9. This total included the upper echelon of the railway administration.

10. See pages.

11. Jones and SaKong, p. 79

12. Myrdal Asian Drama, pp. 66-67.

13. Myrdal, p. 67.

14. In the survey conducted in 1975, 78.2 per cent of businessmen believed that if a policy was implemented it was impossible to avoid complying in 1975, but only 3.2 per cent believed it true of Rhee. This survey of belief does not prove that Rhee operated a soft state, merely about people's view in 1975.

15. Myrdal, p. 66.

16. See pp. 22-23.

17. Jones and SaKong, pp. 85-6.

18. Jones and SaKong, p. 101.

19. For a fuller discussion of these issues, see Tony Michell: Government Economic Decision Making in the Republic of Korea, "IDS Discussion Paper (forthcoming).

20. The possible ambiguities of the two questions preclude further analysis. Supplementary questions concerning perception of the point at which policy is implemented and the point of influence are required, see Jones and SaKong, pp. 74, 137.

21. "Civilians" is the common translation of "mingan-in" an accepted phrase that distinguishes between civil servants and the rest of the population. The word has an Yi dynasty origin.

22. The caution expressed here is that it would be possible to argue that certain 18-24 month periods under Park were "harder" than the norm, and it is too early to judge whether the present aspect of policy will be long term. The conditions for the former system to remerge still exist, and if central direction were removed, would immediately takeover.

23. See Tony Michell, op. cit.

24. Jones and Sakong, p. 140.

25. Korea Times, March 5 1977. This figure was three times the number published in 1975. No breakdown of offences or class of official appears to survive.

26. A further expansion of these themes may be found in Tony Michell: "Government Economic Decision Making in Korea", IDS Discussion Papers, (forthcoming).

27. The Assembly does however act as a useful control on corruption.

28. For further details see Tony Michell: "What happened to economic growth", IDS Bulletin, 1981.

29. This is reminiscent of an anecdote told of Deputy Prime Minister Chang Ki-yong when in dispute with his Minister of Agriculture in the mid 1960s. He was forced to hold a press conference in the Ministry of Agriculture building announcing a policy change and then told the Minister what he had announced.

30. Curiously this plan is hardly mentioned in the reports of international agencies and literature on Korean development in English. For instance Hasan and Rao, Korea Policy Issues for Long-Term Development, give it only passing reference in p. 234.

31. But as noted on p. 110 a great deal of bureaucratic time was taken up with assuring the President that all was well, or in devising policies to correct perceived emergencies which later were not implemented.

32. See Chapter IV, sub-section 2.

33. Japan External Trade Organisation Law number 95, April 26, 1958. For details of JETRO see Chalmers Johnson, MITI and the Japanese miracle, Stanford, 1982, pp. 230-232.

34. Korea Herald, February 1983.

35. This far exceeds to funding of JETRO which was funded from the profits of importing bananas. Johnson, MITI and the Japanese miracle, 1982, p. 232.

36. US Congress Subcommittee on International Relations: Investigation of Korean-American relations, Washington, 1978, pp. 272-291. 12 Korean companies were also ordered to contribute funds.

37. Jones and SaKong, p. 71, all other information from KTA.

38. Korea Times, 1981, December 25.

39. Jones and SaKong, p. 79.

40. Korea Annual 1969, pp. 216-7.

41. KOSMI: Organisation, activities and membership, 1980, pp. 1-4.

42. MCI: Annual Export and Import Notice,, KTA, 1981.

43. In the past the status of civil servant was considered reward enough and only those from well to do families could afford to be civil servants.

44. The Government owned 30-35 per cent of paid up capital in four of the commercial banks, confiscated in 1961. The fifth bank, the Commercial Bank of Korea was sold to KTA in the 1970s.

45. Housewives commonly save through kye, a group saving scheme, to finance household purchases, but the kye are frequently sponsored by semi-professional brokers who may be running many kye at one time. These brokers in turn lend to individuals or to brokers higher up the chain who lend to larger businesses and may receive short term loans from businesses. Cole and Parh, Financial Development in Korea 1945-1978, Cambridge, Mass., 1983, gives ample supporting evidence for this view, pp. 310-133.

46. It was said that the best profit was to buy in the summer and sell in the winter, shares following a cyclical pattern, rising just before dividents were paid in the winter.

47. Since the shares were sold in 1982 a full analysis is not yet available.

48. World Bank: Growth and Prospects of the Korean Economy, 1977, Report No. 1489-KO, Annex G., p. 2.

49. Ibid.

50. The World Bank report: Growth and Prospects of the Korean Economy, makes no mention of deficit financing.

51. Value added tax is not levied on small stores and stalls.

52. For details see Gilbert T. Brown: Korean Pricing Policies and Economic Development in the 1960s, 1973, pp. 63-68.

53. Table 3.4 includes local Government expenditure. Self-financing schemes associated with urban development remove many of the construction costs, roads, sewerage etc., associated with rapid urbanisation.

54. Conscripts are paid a minimal wage, while until very recently most of the expensive military hardware, notably in the airforce was provided by the United States.

55. The phrase popular in Japan in the early 1970s.

56. Jones and SaKong, p. 140.

57. See for instance the discussion in Johnson: MITI and the Japanese Miracle, pp. 3-34

58. This is a contentious area beyond the scope of this work. It could be argued that the suppression of political debate has led both to the demotivation of groups which would naturally work towards the goal of national development, and tothe growth of policians whose role is divorced from public opinion.

59. An establishment is defined in the Republic of Korea as a physical unit engaging in industrial activity, with 5 or more workers.

60. In the manufacturing survey and manufacturing census, where only one firm exists at 5 digit level either nationally or at province level, the return is not printed, but given at the next level of aggregation: EPB, Report on Mining and Manufacturing Census 1978, p. 22.

61. 356 is the total number of companies inluding financial companies of others outside the manufacturing sector.

62. Bai Moo-gi: "The turning point in Korean development", Developing Economies, June 1982 No. 2, pp. 117-140.

63. Quoted in M. Bronfenbrenner: "Economic miracles and Japan's income doubling plan", in W. Lockwood, The State and Economic Enterprise in Japan, Princeton, 1969, p. 525.

64. This assumes that the Manufacturing Census and the Economic Activity Survey can be legitimately companied. See the discussion on p. 170. The manufacturing census found only 165,869 establishments with less than 5 employees, but after eliminating repaid shops or retail, they were left with 81,348 workshops employing 2.37 workers. Even if the full number had been included, 1/2 million workers estimated by the Economic Activity Survey to be within the manufacturing sector would be excluded.

65. See section 7.

66. Jones and SaKong, p. 175.

67. Jones and SaKong suggest a failure rate over the first four years of 26.3 per cent. Their survey is only of companies employing more than 50 workers and they point out the failure rate of smaller firms is intuitively considered to be higher, Jones and SaKong, p. 171.

68. Jones and SaKong, p. 170.

69. Figures from UN Industrial Development in Asia and the Far East, Industrial Development News No. 1, New York, 1965, pp. 37-38, the Republic of Korea, Pakistan and India 1962.

70. This study has yet to be undertaken.

71. EPB Korea Statistical Yearbook: 1961, Deoul, 1962.

72. Lee Hahm-been: Korea Time Change and Administration, p. 131

73. The number of civil servants actually dismissed as opposed to dismissals announced is unclear, see W.D. Reeve: The Republic of Korea, Oxford 1963, pp. 156-7. Certainly all heads of public enterprises were also dismissed.

74. Jones and SaKong, p. 208.

75. Jones and SaKong, p. 208.

76. Economic Research Center of Korea: Industrial Structure of Korea: Vol I Manufacturing Industries, Seoul, 1962, p. 223.

77. Small and medium industry in the Republic of Korea is defined by law as 300 or fewer employees.

78. G.M. Keynes: General Theory, 1961, p. 161-2.

79. It has been suggested that the figure for dishonoured cheques is an indicator of economic activities. The figure is small, 1.6 per cent per annum in 1961, but showing a fall with peaks in 1966 and 1969. For a study of business cycles it would be a more valuable tool. As far as is known there has been no extensive study of the business cycle in the Republic of Korea. See A.R. Michell: Structural Change in a Rapid Growth Economy, unpublished report to EPB, 1979, pp. 48-55

80. J.A. Schumpeter, The Theory of Economic Development, 1934, p. 66, see discussion in Jones and SaKong, pp. 177-8.

81. Jones and SaKong, pp. 177-78.

82. Perhaps of any economy.

83. I am indebted to Mr. Jenkner of UNDP for a verbal summary of this programme.

84. This account is based on a case study of a small labour intensive industry conducted in 1979-80 manufacturing solely for export comprising of about six major independent operations and a constant entry and exit of about six more, would-be enterprises. S.I.T.C. 8942.370, BTN 97035.

85. Jones and SaKong, pp. 210-257.

86. There is a longstanding antagonism between Cholla-do and Kyongsang-do.

87. The religious affiliations were 47 per cent Buddhism, 17.3 per cent Confucianism, 22.3 per cent Christian. 1977 data from, Korea Statistical Handbook, 1978, 108-9.

88. The young entrepreneurs are those born after 1934 and were therefore 20 at liberation.

89. Jones and SaKong suggest this may be the result of the elites ability to avoid military service in the 1950s.

90. Unfortunately Jones and SaKong do not state what percentage of first sons' fathers were businessmen, which may invalidate this conclusion.

91. Jones and SaKong, Table 53.

92. Jones and SaKong, p. 99.

93. I have been unable to find any Korean firms which employed indexed accounting.

94. For an account of the Japanese system see Chalmers Johnson, Miti and the Japanese Miracle, Stanford, 1982, pp. 201-211.

95. Overloaning consists of the central bank underwriting loans to industries which exceed the commercial banks reserve requirements. In both the Republic of Korea and Japan these practices required careful laundering to prevent IMF objections.

96. West German shipbuilding in 1978 had a debt ratio of 569.49. In 1979-80 Korean shipbuilding recovered its profitability and cut its debt ratio to around 180. This appears to have been the Government writing off debts, though I have yet to get confirmation of this.

97. EPB: Economic Survey of the 1972 Korean Economy, 182-5.

98. EPB: Economic Survey of the 1972 Korean Economy, p. 182-5.

99. Due to writing off debts and an improvement in orders, the shipbuilding industry made a remarkable recovery in 1979-80 see p. 148 and note 2.

100. Largely because investments which offer the geratest return on capital are not necessarily those which contribute most to industrial development.

101. A total of 1.34 billion dollars (sic) was allocated for this process. One of the interesting things about fund allocation for small and medium industry is that it tends to have a very low take-up rate despite the shortage of funds. This suggests either small and medium industry cannot face the strings attached to the money or that there are institutional obstacles preventing small industry from getting the funds allocated.

102. EPB: Economic Survey of 1972 Economy, p. 184.

103. Jones: Public Enterprise and Economic Development: The Korean Case, 1975, pp. 155-180.

104. Jones and SaKong: Government and Entrepreneurship, 1980, p. 164.

105. Jones: Public Enterprise and Economic Development, 1975, p. 158.

106. See discussion under labour market, pp. . (WHAT PAGE NUMBERS???)

107. Businessmen report that KHIC has not yet achieved the sort of efficiency of POSCO or KECO due to old style management.

108. B. Cohen: Multinational Firms and Asian Exports, Yale, 1975, pp. 83-4.

109. B. Cohen: Multinational Firms and Asian Exporters, Yale, 1975, pp. 72-90.

110. EPB: Guide to Investment in Korea, 1979, see sub-section 3.3 (CHECK).

111. EPB: Korea Statistical Yearbook, 1980. A branch is not synonomous with firm so that less than 238 companies had unions.

112. Park Young-ki: Labour and Industrial Relations in Korea: System and Practice, Sogang University Press, 1979, p. 88.

113. This was especially true of foreign banks.

114. The withdrawal was for very different reasons but all (according to the foreign partner, because of Korean Government interference).

116. The main objection to the chaebol in the Korean popular mind is that these are companies owned by one identifiable man whose reported monthly income excites universal envy. It is an example of the strong antipathy to very rich people in Korean popular culture.

117. A summary of the brilliant paper by Jones, Jae-bul and the Concentration of Economic Power in Korea Development: Issues Evidence and Alternatives, KDI/World Bank, 1980, this is shortly to be reprinted in SaKong, Background papers to the Fifth Five Year Plan, KDI (forthcoming).

118. One company, Daewoo did not publish accounts in time to satisfy Fortune and was excluded.

119. Figures based on Jones, Jaebul, 1980, pp. 11-43.

120. Jones states 166 million, alternative figure from Yulsan Group, Yulsan 1978, Seoul 1978.

121. For one account of the collapse of Ulsan see Jones, Jaebul, pp. 97-99. The true story is much more political than this. In order to bring about the collapse of Ulsan it was necessary to unseat at least one Blue House Official.

122. This detective work is pieced together from Yulsan 1978 and KCCI, Korean Business Directory 1981.

123. A great deal of confusion arises from the fact that between 1976 and 1980 there were actually two Hyundai companies headed by two antipathetic brothers in dispute since 1976. The World Bank and other foreign companies have been misled into thinking the company was still unified, see Asia Wall Street Journal, December 23, 1980.

124. Asia Wall Street Journal, 1980 December 23.

125. KHIC was to be given a much more important role in manufacturing strategic industries as a result.

126. Korea Annual 1982, p. 315.

127. Jones and SaKong state G.T.Cs were given no specific financial incentives, Government and Entrepreneurship, p. 62. This was definitely incorrect by 1979. MCI is however extremely guarded about giving information concerning G.T.Cs.

128. In 1975 the Small Business Systemisation Promotion Act was passed giving the Government the duty to prevent delays in payments by large scale firms.

129. MCI: Ten Year Plan for Small and Medium Industry, (in Korean).

130. Larry Westphal: "Korea's Experience with Export Led Growth", World Development, 1978, p. 375. In this account Westphal takes the supply of high quality labour for granted.

131. Gavan McCormack: "The South Korean Economy: GNP versus the People' McCormack and Gittings, Crisis in Korea, 1977, p. 63. There is a considerable body of critical literature in Japanese in this vein. Unfortunately the level of accuracy often leaves something to be desired.

132. For a recent account see "Flames in Seoul's peace Market Damage the Myth of the Passive Asian Woman Factors Worker" Newsletter of International Labour Studies, July 1980, pp. 2-6, for Korean support for this view see Jung Yong-duck "Income Redistribition in Korea: Causes for the Growing Concern", Journal of East and West Studies (Vol. XI, No. 1), 1982, pp. 29-48.

133. This figure assumes that those employed less than 18 hours a week are all in the family sector in 1963.

134. G. Ranis: "Industrial Sector Labor Absorption" Economic Development and Cultural Change, 21, No. 3, p. 387.

135. H. Oshima: "Labour Absorption in East and Southeast Asia", The Malayan Economic Review, XVI, No. 2, 1971, Table 1, p. 68, for further discussion see P. Kuznets, Economic Growth and Structure in South Korea, 1977, pp. 111-127.

136. Where a firm served both export and domestic market, the benefit was also passed on to the Korean consumer, e.g. television sets.

137. Ro Chung-hyun "Population and the Asian Environment". Paper presented at Ann Arbor in 1971, p. 9. Ro who held an influential position stated that the majority of the Korean people had seen no benefit from a decade's economic growth. Quoted in D.T. Healey "Development Policy: New Thinking About Interpretation" Journal of Economic Literature 1972. This would appear to be an exaggeration.

138. In order to improve the anlysis of the labout market it would be necessary to improve the collection of data. The major source, the quarterly survey conducted by EPB which takes a 1/1500 households sample structured round the previous population census (1/100 prior to 1972), only asks about employment in the previous week. Hence all EPB employment data assumes that peaks and troughs can be captured by four weeks in the year. The transplanting peak in June is apparently caught, but the harvesting season occurs after September 15 and goes unrecorded in the survey. Until monthly employment data is collected, the total picture can hardly be evalued. Likewise, the inclusion of workers working merely one hour as employed, makes little sense.
This is based on an ILO classification of the 1950s, but bears little relationship to the purpose of employment which is to contribute to the household income.

There are further reservations about the wording of questions about employment. Statistically the unemployment data is subject to a standard error of 1.86 per cent, and pre-1972 data to a much larger margin. Nor are wages recorded, though the survey distinguishes between self-employed, unwaged family labour, regular worker, temporary worker and worker hired by the day.
For wages by four digit industry, there is an independent monthly layout survey conducted by the Ministry (formerly Office) of Labour Affairs. This is based on a survey of 3,347 establishments employing more than 10 employees, and purports to cover about 50 per cent of workers in manufacturing. The census of manufacturing provides a periodic cross check on wages, and the quinquennial census collects employment data which is the only available regional employment data.

139. A major problem of most Koren data is the lack of regional data. Most cities offer employment figures, but these are based on estimates of local officials and not on any survey. They bear little relation to the census data from the quingnemial population census.

140. Proportions taken from the city survey of salary and wage earners households 1974. For data see McGinn et. al, Education and Economic Development, p. 29 and EPB, Major Statistics of the Korean Economy, Seoul 1982, Table 11.2.

141. A.R. Michell: Structural Change in a Rapid Growth Economy, unpublished report to EPB 1979, p. 200 et. seq.

142. R. Dore: The Diploma Disease, University of California, 1976.

143. New questions added to the employment survey by EPB at the end of 1981 may help elicidate this question.

144. Korea Statistical Yearbook 1979, data for 1978 based on surveys by schools supplied to the Ministry of Education. Figures in Parenthesis are for 1979 from the Korea Statistical Yearbook 1980.

145. Identifying production workers in these tables is not satisfactory since transport workers are also included.

146. Especially 1972 when real wages dropped more for production workers than for management and in 1976 when managers wages surbed ahead. The differentials were at their all time lowest in 1974.

147. McGinn, Snodgrass etc.: Education and Development in Korea, p. 178 and Fn. 50.

148. This figure is difficult to estimate since married women, and those still in education, or with too high or low qualifications must be excluded.

149. Wages and the "shameful" nature of employment do not correlate. Bus girls earn much more than tearoom waitresses for instance. Other service sector employment is complicated by tipping which makes wages difficult to evaluate.

150. Average for all years of experience - Average in first year 57.5 per cent, in second year 55 per cent and so on. Actually occupations vary greatly. Electronics workers receive 62 per cent in the first year and 56.4 per cent in the second. Textile workers 71 per cent in the first year and 67 per cent in the second. Ministry of Labour Affairs, Labour Statistics Yearbook 1981, Seoul, 1981.

151. Wage differentials are difficult to assess since male workers doing apparently identical jobs are often assigned a different job specification.

152. Gijsbert van Liemt: "The Employment Effects of the Fruit and Vegetable Processing Sector in the Republic of Korea", ILO, 1980, p. 60. This is important because the canning industry relies on seasonal labour, employing labour during agriculturally slack period.

153. For further analysis see T. Michell: Korea Under the Fourth Five Year Plan (forthcoming).

154. Korea Times and Korea Herald, Dec. 23 1981.

155. The total figures used in these tables are very suspect and internally inconcsistent with others in the same collection of statistics, Ministry of Labour, Yearbook of Labour Statistics, 1981, Table 19.

156. Interviews conducted 1978-9.

157. Bai Moo-gi: "Education, Workers Behaviour and Earnings" SNU Economic Review, Dec. 1977, pp. 292-4.

158. I am indebted to Stephen Tang of Hong Kong University for helping clarify my ideas on this subject.

159. Samsung has a Samsung Employees Aid Foundation endowed with 3.5 million dollars from the Chairman which provides scholarships, hardship funds and national sports competitions for employees. In the early 1970s however an attempt to unionise the Scheil Sugar Company discovered Samsung workers were not in fact the best paid of comparable workers, but paid considerably less.

160. Junior executives stressed the importance of financial guarantees given by superiors as a reinforcement of the human relationship system.

161. Much less favourable stories circulate about the free trade zone at Masan and the associated Changwon Complex but I have been unable to verify or disprove these.

162. POSDCO maintains a hospital and high schools, guaranteeing employees children jobs. Apartments are also provided for married employees.

163. Various BOK statistics put price increases in 1977-1979 higher than the consumer price index compiled by EPB. The price index is not based round average consumer purchases, almost ignores house prices and rent, and is biased towards monopoly items whose price was controlled by the government at this time.

164. Interviews with employers, employees and EPB officials in 1978-1979.

165. Park Young-ki: Labor and Industrial Relations in Korea: System and Practice, Sogang University Press, 1979, pp. 25-7.

166. Park Young-ki: Labour and Industrial Relations, pp. 86-7.

167. Labour Management Council Law, 31 December 1980, Article 28, 2 as translated in the KEA Quarterly Review, March 1981.

168. A brief summary of trade union history may be found in Park Young-ki: Labour and Industrial Relations in Korea, pp. 35-47.

169. Unlike Western policy and security organisasions, a great deal of Korean policy and KCIA time is taken with mediation, minor adjustments and trying to preserve the peace through consensus rther than resort to legal action.

170. Report in Korea Annual 1980, p. 197. However by the time of the 1982 Korea Annual, only 206 labour disputes for the whole of 1980 were reported, the figure being adjusted to correspond with Ministry of Labour Statistics. For a variety of reasons labour disputes may not reach national statistics.

171. Korea Annual 1980, p. 197.

172. Chosun Ilbo editorial, April 26, 1980, p. 2.

173. Park Young-ki: "Labour and the Business Environment in Korea", Asian Economies, 1979, p. 29.

174. Chosun Ilbo editorial April 26, 1980, p. 2.

175. See Table 3.15.

176. See pp. 90-98.

177. A comparison between national income accounts and expenditure surveys suggests that the share of the bottom 40 per cent could be as low as 12 per cent, Lee Suk-chae, "A Note on Dr. Renaud's Paper". It is estimated that about 20-25 per cent of households are not covered by either survey.

178. H. Chenery, et. al.: Redistribution with Growth, O.U.P., 1975.

179. Fifth Five Year Economic and Social Development Plan, p. 89. The plan does not announce any policies directly aimed at changing the distribution of income, rather aiming at basic needs and improving the equality of opportunity. The improvement in distribution is not mentioned in the text, only in table VIII, p. 172.

180. Mason, Kim et al.: Economic and Social Modernisation of Korea 1945-1975, Harvard/KDI, 1980, p. 440. The deleted sentence reads "On the whole Korea has picked a development strategy that has favoured comparatively low degree of inequality". This was written before the figures for the later 1970s were available. Korea still has low inequality compared with countries such as Brazil. For an evaluation of Korea compared with other low inequality strategies see Amartya Sen: "Public Action and the Quality of Life in Developing Countries", Oxford Bulletin of Economics and Statistics, 1981, No. 4, pp. 287-319.

181. Y.I. Chung: "Poverty in Korea" in Philippine Economc Journal, 1979, p. 509.

182. Hakchung Choo: "Widening Urban-Rural Differentials in Korea: A Re-examination" Journal of East and West Studies, Vol.XI, No. 1, 1982, pp. 1-27, and Jung, Yong-Duck, "Income Redistribution in Korea: Causes for the Growing Concern" Journal of East and West Studies Vol. XI, No. 1, 1982, 29-48.

183. This was my conclusion based on feamle electronics workers wages. However textile workers receive one of the highest wages for females.

CHAPTER IV

SECTORAL STUDIES

1. Introduction

It has been argued that there are two types of Korean export industry, labour-intensive industries, employing predominantly women, and industries such as iron and steel and shipbuilding where the Republic of Korea's advantage is not so much cheap labour, indeed they may be less labour-intensive than their longer established rivals in the West, but due to cheaper capital equipment and modern design. The chosen sectors, textiles and electronics both belong to the former category.

Tables 4.1. and 4.2. summarise the importance of the two chosen sectors, textiles and electronics. Textiles which provided nearly 50 per cent of the value of exports in the 1960s has been a relatively slow-growing industrial sector, although the rate of increase has actually accelerated in the 1970s, despite a shrinking share in total exports. Electronics, by contrast, despite having represented the fastest growth rate of any industrial sector in both the 1960s and 1970s still accounted for only 13.6 per cent of exports in 1979 (about 40 per cent of the value of textile exports). Of the two sectors, a much higher proportion of textile production is exported (about 65 per cent) than of electronics (45 per cent). By number of projects, foreign investment in electronics is much higher than in textiles, 197 investments against 79 in textiles, by value the difference is much smaller, 13 per cent as against 9.9 per cent.[1]

Although the literature on Korean development abounds in general surveys of the overall process, sectoral studies in either Korean or English are relatively rare. At the time of writing only two major studies in English are known, Kim Yung-bong's "The Growth and Structural Change of Textile Industry", a summary of his Korean language book The Growth and Structure of Korea's Textile Industry, and Suh Sang-chul's "Development of a New Industry through Exports: The Electronics Industry of Korea".

Table 4.1 Industrial production index (1975 = 100)

	Production Index						Average growth rate (in percent)	
	1955	1960	1965	1970	1973	1979	1961-70	1971-79
Manufacturing	4.3	7.6	11.9	35.3	64.8	220.1	16.1	18.2
Food	12.8	20.8	18.9	54.9	93.2	249.9	11.1	12.2
Beverages	14.3	21.7	22.0	56.0	79.8	222.1	9.1	15.0
Textiles	4.9	7.2	10.6	37.8	76.2	181.2	12.9	16.5
Wearing apparel	-	-	7.1	15.3	59.5	198.7	12.3	17.6
Leather	1.8	1.7	2.1	2.2	19.1	167.1	5.9	28.4
Wood	9.9	11.8	13.6	63.7	102.2	169.2	16.1	11.2
Paper	4.9	12.0	22.7	41.1	79.9	199.5	20.4	16.0
Printing & Publishing	12.3	25.2	38.9	77.3	88.6	173.4	9.6	12.4
Chemicals	2.9	7.6	13.4	51.4	77.9	219.7	32.1	23.9
Pottery	140.9	11.5	29.8	57.9	91.4	269.7	21.6	13.9
Iron & Steel	1.3	4.1	6.6	23.9	48.9	288.3	21.8	30.8
Non-ferrous metal	4.6	14.0	31.7	39.0	61.5	325.9	9.6	28.4
Metal products	5.5	8.5	11.6	24.0	38.0	301.7	13.2	21.8
Machinery	20.3	16.2	18.7	34.2	82.5	254.4	9.9	27.3
Electrical machinery	0.2	1.2	4.0	14.1	47.9	360.3	33.6	37.4
Transport equipment	1.0	1.2	5.1	17.5	32.9	257.1	24.5	23.1

Source: EPB: Korea Statistical Yearbooks, various dates.

Table 4.2 Change of export structure by sectors (in per cent)

	1961	1966	1971	1973	1976	1978	1979	1981	1982
Heavy & Chemical Industry Products	41.2	15.3	21.6	28.9	37.0	41.6	44.7	47.3	52.2
Iron & Steel Products		8.9	3.7	7.9	7.9	11.1	14.6	15.4	15.4
General Machinery	n.a.	2.7	0.3	1.0	2.1	3.3	4.4	3.2	3.3
Electronics		3.1	7.6	11.2	14.2	12.2	13.6	9.4	8.8
Vessels		0.1	0.4	2.9	4.8	5.3	3.8	7.3	13.7
Others		0.5	9.6	5.9	8.0	9.7	8.3	12.	11.
Light Industry Products	58.8	84.7	78.4	71.1	63.0	58.4	55.3	52.7	47.8
Textiles	(26.6)	48.5	49.2	43.2	37.6	34.9	33.2	31.1	29.0
Ply & Wood Products	19.5	18.4	11.1	10.6	4.9	15.0	4.2	2.5	1.5
Others	12.7	17.8	18.1	17.3	20.5	18.5	17.9	5.3	5.8
Manufactured Products	100.0	100.0	100.0	100.0	100.0	100.0	100.0	13.3	11.5

Source: Data supplied to EPB by the Office of Customs Administration.

Both industries are highly labour-intensive employing predominantly women. In 1980, women predominated in all areas of textiles and clothing as well as in consumer electronics as shown in Table 4.3.

Both sectors chosen are therefore unusual compared with the rest of Korean industry in that the percentage of female workers in the rest of manufacturing (excluding the four sectors above) is only 28 per cent. Together by 1979 they employed 42.9 per cent of manufacturing workers, and produced 46.8 per cent of exports. Thus they are 17 per cent more export oriented than the aggregate of the rest of Korean industry, with a ratio of exports to worker of 1:1.09 compared with 1:0.93 for the rest.[2] Collectively the four sectors also employed 62.6 per cent of all women employed in manufacturing and only 25.4 per cent of all men. To this extent it may be argued that if the Republic of Korea's export industries follow its comparative advantage, that comparative advantage lies in the employment of women. What has proved impossible so far is to obtain some measure of the productivity of capital in these export industries.

Table 4.3 Percentage of female workers in electronics and textiles

321	Textiles	68%	(70%)
322	Clothing	77%	(76%)
324	Footwear	58%	(56%)
383	Electrical Machinery	55%	(56%)
3831	E. Machinery	23%	(23%)
3832	Cons. Electronics	65%	(65%)
3833	Domestic Appliances	34%	(34%)

Source: 1980 Labour Statistics Yearbook. Figures in parenthesis come from EPB Manufacturing and Mining Census, 1978.

2. The textile industry

2.1 Overview

Of the two sectors studied, textiles are undoubtedly the most important. Whereas in Singapore electronics employ about 20 per cent of manufacturing workers, and textiles 14 per cent, by 1978, 31.3 per cent of manufacturing workers were in textiles in the Republic of Korea, and only 7.7 per cent in electronics.[3] This is all the more remarkable when it is remembered that since about 1970, the Government has given relatively little attention to textiles, and that by the mid-1970s the textile sector was suffering from a shortage of funds to modernise the industry. Although this was recognised in 1979 and further funds made available, the result is not yet apparent in the industry.

Despite this as Table 4.1. shows, textile and garment output actually accelerated in the 1970s compared with the 1960s, though in neither case growing as fast as the average for the whole manufacturing sector. Under these circumstances textiles lost their remarkable position in the nation's exports, of 49.2 per cent in 1971, falling to around one third by the end of the decade (see Table 4.2.).[4]

In as far as Korean growth was export-led growth, textiles were therefore the most important sector. Moreover it should be recognised that the textile industry has an unusually predominant position in the Korean economy. Table 4.4 shows international comparisons for 1968. While it is not unusual for the value-added in textiles to be very high in less developed countries, where it may be the only modern sector (as in Pakistan, U.A.R. and Syria in 1968) as industrialisation proceeds the share of value-added normally falls, in rapidly growing economies at an even faster rate. Thus in Japan, the share of the textile industry fell from 17 per cent in 1955 to 12.4 per cent in 1960 and to 11.4 per cent in 1965.[5] In the Republic of Korea the share of value-added stayed remarkably high from 1968 when it was 19.5 per cent to 1978 when it was 18.3 per cent.[6]

What has happened in the Republic of Korea has therefore been unusual. Although the share of textiles in exports has fallen by 15 per cent over the period 1968-1978, and output increased more slowly than the manufacturing average, the share of total value-added has fallen by just over 1 per cent.

Table 4.4 Shares of textile industries in the value added of manufacturing industries of selected countries, 1968

Shares (%)	Country
Over 30	United Arab Rep. (39.7) Syria (26.7) Pakistan (31.4)
20-30	Iran (24.5)* Ethiopia (28.9) Portugal (23.3)
15-20	Greece (19.9) Rep. of Korea (19.5) Nigeria (17.9) Chile (17.8)* Ceylon (17.5)* Italy (15.3) Iceland (15.2)*
10-15	Turkey (14.4) Brazil (13.8) Yugoslavia (13.2) Peru (12.5) Spain (12.5) Hungary (10.2)
Less than 10	New Zealand (9.4) Czechoslovakia (9.2) Switzerland (9.2)* Netherlands (9.1)* W. Germany (9.0)* Australia (8.5) United Kingdom (8.4) Japan (8.4) Finland /7.8) Canada (7.4) U.S.A. (7.2) Norway /7.0) Denmark (7.6)* Panama (6.2) Sweden (5.9) Singapore (4.6) Dominican Rep. (3.9) Luxembourg (0.6)

Notes: Includes production of wearing apparel.
* indicates the share in 1967

Source: U.N., The Growth of World Industry, 1971, as quoted in Park Chong-kee, Macroeconomic and Industrial Development in Korea, KDI, 1980, p. 222.

Behind this figure lies a remarkable story in increasing productivity in a sector not receiving the full paraphenalia of Government incentives and cajolery. The success of the industry under such circumstances must put in question the necessity of some of the Government's measures which call for extreme intervention in the market.

The development of the textile industry has a long history. Traditional textiles were cotton, silk and vegetable fibre products such as ramie produced primarily for household consumption. There are still certain traditional textiles produced on this basis, notably sambe which is used for winding sheets in Korean funerals. The first modern sector factory, the Chosun Spinning and Weaving Company was built in Pusan in 1916 by a Japanese company, but under the stimulus of Japanese expansion in Manchuria in the 1930s every part of the textile industry expanded rapidly through investment of both Japanese and Korean capital. By 1937, capacity exceeded domestic demand in a number of products and textiles constituted 60 per cent of manufactured exports. Rayon was introduced into the Republic of Korea as early as 1910 and rapidly gained a substantial place in the Korean market.

Despite the problems of the Second World War, the independence era and the Korean war, by 1953 output of rayon cloth was almost twice that of the pre-war peak of 1937, although silk production remained below pre-war levels until the 1960s. In the wool sector the 10 major plants were located in the South and suffered minimal damage. Investment through UNKRA and ICA produced a rapid expansion of woollen and worsted textiles. By 1956, reconstruction of the cotton industry was complete and the Government embarked on a vigorous expansion programme.

But by 1960 the industry was suffering from serious problems. Overcapacity was considerable and domestic demand had not grown as expected. By August 1961, in the 15 largest cotton mills (employing 20,000 workers, or a quarter of the industry's labour force) only 86 per cent of spindles and 56 per cent of looms were in operation. Similarly rayon and silk production had been falling since 1958. Moreover despite overcapacity in Korean industry, imports of textiles remained at a high level. Exports in 1963 were less than a quarter of imports. Much of the imports were in the form of fibres, the Republic of Korea importing 99 per cent of its cotton (largely through P.L. 480 imports), and all of its wool, synthetic and man-made fibres.[7] Not

until 1969 did the value of textile exports exceed the value of textile and related imports.

Nor was the possibility of exporting surplus production a simple matter. It is conventional to think of Korean exports developing in the 1960s in an atmosphere of free trade. However, almost at once Korean textiles ran into serious barriers to trade. These took the form of restrictive covenants on the export of cotton textiles produced with P.L.480 cotton and quotas placed on Korean textiles by the Kennedy Administration in 1962.[8] The main restrictive covenant was that any export earnings should be used to purchase further United States cotton. Prospects for increasing exports were considered extremely unlikely in 1961.[9]

Even where restrictions did not exist, as in the case of Korean silk, there were major problems. The first trade mission to Europe in August 1962 organised by the Korea Trade Association reported that there was a considerable market for silk fabrics in the West, but only if the price could be lowered.[10] It was not therefore merely a question of attracting businessmen's attention to export markets, it required a readjustment to competitive markets abroad by increasing productivity, learning new management techniques and lowering other costs involved in manufacturing. Nor did exchange rate policies necessarily help where the raw material was imported. The cotton industry found that the 1961 devaluation failed to make the export market any more attractive than the domestic market (where prices could be raised).[11]

The chief development of the 1960s was the rise of garment exports to a position far beyond their place in the industry as a whole. By 1968, garments exceeded yarn and fabric exports by 50 per cent, and soon occupied a position a little less than two thirds. While it might be argued that much of the output of yarn and fabrics went into exports of garments, this does not appear to be the case. Rather imported fabrics were used for garment exports, and this accounts for the continued high level of fabric imports which under the Korean trade regime must be almost entirely for export.

The second trend is the decline of the cotton industry from 43.2 per cent of value-added in the industry in 1963 to 12.2 per cent in 1978. Correspondingly, synthetic yarns have increased their position, although synthetic fabrics have shown much smaller gains, partly because of the development of exports of yarns.

Table 4.5 Imports and exports of textiles and wearing apparel (millions of current US dollars)

		Import of Textiles and Wearing Apparel			Export of Textiles and Wearing Apparel		
Year	Fibres	Textiles and Fibres	Wearing Apparel	Total (B)	Textiles	Wearing Apparel	Total (D)
1962		79.1	0.2	79.3	6.6	1.1	7.8
1963		85.9	0.3	86.2	13.1	4.6	17.7
1964	52.8	72.5	0.2	72.7	26.7	6.6	33.4
1965	59.1	86.7	0.5	87.1	34.1	20.9	54.8
1966	66.6	111.7	0.5	112.2	47.3	33.4	80.7
1967	80.3	150.0	0.2	150.1	66.0	59.2	125.2
1968	90.3	193.0	0.4	193.4	81.3	112.2	193.5
1969	96.7	206.3	0.4	206.8	92.8	160.8	253.6
1970	119.8	247.6	0.5	248.1	127.3	213.6	341.1
1971	139.2	276.2	8.1	284.3	182.4	304.3	486.7
1972	131.3	288.3	18.8	307.1	239.1	442.2	681.3
1973	307.0	560.4	10.9	571.3	528.5	749.9	1,278.3
1974	271.8	578.6	5.9	584.5	569.1	957.0	1,526.0
1975	288.3	589.5	3.8	593.2	691.9	1,148.2	1,840.1
1976	339.9	679.6	9.7	689.3	964.4	1,856.0	2,820.4
1977	356.8	713.7	8.7	722.4	1,093.4	2,369.0	3,162.4
1978	407.9	815.9	13.5	829.4	1,544.4	2,580.0	4,124.4
1979	626.8	1.075.0	17.4	1092.4	1,827.9	2,870	4,697.9
1980	778.7	1.195	14.1	1209.1	2,210.0	2,949.0	5,159.0

Source: Data supplied by UNCTAD.

Table 4.6 Changes in the value-added in textile production

Textile	1963	1966	1970	1973	1978
Yarns					
Cotton	23.2	11.0	5.6	7.5	7.8
Others	11.0	16.1	18.6	27.9	21.2
Fabrics					
Cotton	20.1	14.3	9.4	7.9	4.4
Others	20.9	18.9	23.2	20.4	22.4
Knitted Goods and Other Textiles					
Manufacturing	14.9	22.1	26.7	19.3	16.7
Wearing apparel	9.8	17.6	16.5	17.0	24.7

Note: Based on the value-added in current prices.

Source: Economic Planning Board, Report of the Interpolated Time Series Bases on the Mining and Manufacturing Census Results, 1963-1973, Seoul 1974, 1978 data from BOK, Input Output Tables for 1978, Seoul, 1980.

The fortunes of the various branches of the textile industry, cotton, wollen, silk, synthetic and man-made fibres, knitting and garments underline the process of Korean development outlined in Chapter II in that domestic demand remained the major pillar of the industry until the early 1970s, although, of course, exports were much more dynamic in the 1960s than domestic demand. Exports overtook domestic demand in woollen and cotton textiles in the early 1970s, but in the case of silk, viscose and synthetic fabrics production for export did not quite equal production for domestic consumption by 1975. On the other hand chemical fibre production for export overtook domestic consumption as early as 1971 despite the fact that production had only begun in the second half of the 1960s. In the case of the knitting industry productive capacity rose from 10,000 machines in 1962 to 33,000 machines in 1970 largely through an increase in domestic demand, but the

Table 4.7 Exports as a percentage of total output

	Fibre Spinning	Textile Fabrics (11)	Garments (12)	Knitted Goods
1966	9.7	14.9	18.4	
1973	28.9	35.7	66.	49.7
1975			52.4	60.3
1978 I-O	15.0	32.9	60.	66.

Source: BOK I-O Tables: Interindustry transactions at producer prices competitive import model.

number of machines doubled between 1970 and 1974 to serve increased exports. By the early 1970s knitted goods accounted for 25 per cent of all textile and clothing exports. In the case of garments, exports accounted for more than 50 per cent of production for the first time in 1973.

In theory it might be argued that the two markets were mutually beneficial allowing both the benefits of economies of scale, or alternatively either giving domestic or overseas consumers the benefit of lower costs. For this to be true it would merely be necessary to show that large firms achieved higher labour productivity than small firms. Unfortunately as surveys of labour productivity in 1973 show, large firms were not necessarily achieving higher labour productivity than those employing 199 and less. Indeed firms between 200 and 499 experienced a markedly lower level of productivity.[12]

If this is correct then the growth of export markets often added extra units of production rather than improving the efficiency of the industry through economies of scale.[13] From this point of view the characteristics of Korean development which favoured the creation of large scale plants, through selective allocation of credit and Government preference did not always advance the efficiency of the textile industry. In fact the

ratio of small to large industries remained constant between 1963 and 1966 with the 76 establishments employing more than 200 employees producing 52.8 per cent of output.

Large firms increased their share rapidly to 1973 when 121 firms employed more than 500 persons, and produced 61.4 per cent of gross output. After 1973 the fact that large scale firms were not always more efficient than smaller firms and that Government attention was diverted to other areas of industry meant that small scale companies marginally increased their share of output by 2 per cent, although the number of firms employing more than 500 employees increased from 121 to 200. In this increment, joint investment with Japanese companies was a major factor (with 52 joint ventures in 1973-74).[14]

However, by 1978 the anticipated economies of scale were evident in terms of labour productivity, confirming the assertion that the industry underwent a period of major readjustment in the 1970s increasing productivity and percentage of value-added at an impressive rate.[15] Before attempting to assess how this was achieved, it is necessary to give a brief outline of the development of various sectors within the industry. In doing so it is important to note that the nature of the manufacturing census, on which such a study is partly based, forces distortions since the Korea Standard Industrial Classification tries to separate spinning and weaving and dyeing operations which are integrated in large enterprises.[16]

2.2 The cotton industry

As noted above the cotton industry accounted for 43 per cent of value-added in 1963, but failed to grow at a rate comparable to other sectors, so that by 1966 its share had fallen to 25 per cent. The 15 large companies which were the Cotton Spinners and Weavers Association, one of the most powerful industrial organisations in the Republic of Korea at the beginning of the 1960s, either diversified, or suffered from the relative decline of the industry. By 1980, only four of the original 15 companies survived under their own names and the total number of companies within the association had only risen to 21.[17]

The production statistics for cotton yarn and cloth show a five-fold increase in yarn and a three-fold increase in cloth output since 1966, and the

relative importance of the export market. Domestic consumption has failed to grow largely because of a switch to synthetic fabrics which were unavailable in the mid-1960s.[18] What such figures cannot show is the steady increase in the quality of the cotton yarn and textiles produced (reflecting increasing skill and value). In 1961, the type of fabric exported was made with 12 or 13 ply yarn (mainly for upholstery). The count has grown steadily finer, reaching an average of 25.98 in 1975 and 26.57 in 1978.

Manufacturers have therefore differentiated their product even in what might appear to be a relatively unsophisticated product, and exports of coarse cloths have almost disappeared. Moreover since the Republic of Korea has become a major producer of synthetic fibres, mixed textiles have grown rapidly, with synthetic fibres accounting for almost one quarter of raw materials by 1979, compared with only about 5 per cent in 1971.

Cotton and mixed fibres are an important input into the garment industry, both knitted and otherwise. Moreover the share has been increasing despite the world trend towards synthetic fibres. In 1971, cotton products constituted 16.4 per cent of textile exports, and in 1979 24 per cent. Of these about half is exported directly, and half used in garments. To some extent this is misleading since about 50 per cent of the materials included in this calculation by Korean figures are 35/65 cotton/polyesters of which of course only 35 per cent is cotton. To the extent that about 40 per cent of all cotton textile exports fall into this category it is a measure of how far the industry has changed in character from the one that existed in the early 1960s.

Koreans attribute the increase in yarn exports in the face of the various non-tariff barriers to the decline in spinning capacity in advanced countries, most notably Japan where the number of spindles has dropped by 27 per cent. By comparison, in the Republic of Korea the number of spindles increased from 1.9 million to 2.8 million, between 1975 and 1979. Of non-garment cotton exports almost 50 per cent go to Japan and Hongkong.

Thus contradiction of the spinning industry in Japan and in other advanced countries has assisted the Korean industry, and despite non-tariff barriers to trade, exports have increased. The Republic of Korea's ability to continue this growth depends chiefly on the ability to continue to

differentiate the product, on holding down the price of the finished product, and the level of demand in advanced countries.

The price of the finished product is particularly difficult for the Republic of Korea in view of a higher rate of inflation than most competitors. Any compensating devaluation also raises the price of cotton imported from the United States. Despite determined Government efforts to encourage Korean farmers to grow cotton in the 1960s there has never been a serious chance that the Republic of Korea, with its severe shortage of agricultural land, could compete with the United States Mixing domestically produced synthetic fibres offers a better course.

The chief option is to increase productivity per employee, although labour costs are less than 14 per cent of manufacturing costs. This is mainly because wages are rising throughout industry and hence labour costs as a percentage of manufacturing costs are increasing, in the case of cotton spinning from 10.34 to 12.76 between 1977 and 1978 and cotton fabrics from 12.08 to 14.63. The incentive to increase labour productivity is therefore high and there has been a three-fold increase in productivity per eight-hour shift over the past decade, with a climb in recent years of over 5 per cent per annum.

Despite this the cotton industry is on the margin of unprofitability. On aggregate the spinning industry made a serious loss in 1977 and total revenues exceeded total expenses by only 0.2 per cent in 1978. The weaving industry on the same criteria made a 1.1 per cent profit in 1977 and 3.7 per cent in 1978.[19] These figures suggest that with a normal distribution curve a number of enterprises must be headed for liquidation.[20] Concern about this within the Government has led to a new emphasis on modernisation of facilities but the incentive to invest is severely dampened by the limited prospects of high profitability. The whole aim may also be frustrated by the Government's desire to promote domestic textile machinery which in the past has been of a slightly obsolete character made under license from a Western company. Textile companies resist as best they can, which means that small companies must buy Korean and large companies can import.[21]

2.3 Wool textiles

If productivity has risen in the cotton sector, it has risen much faster in the woollen and worsted industry. It is of course a much smaller sector than cotton, but productivity rose by 434 per cent between 1970 and 1978, a growth rate which far surpassed the rate of growth of fixed assets per employee.

In the last decade no new establishments for worsted production have been opened, and only 16 in woollens. At the same time spindles have increased by 119.6 per cent and weaving facilities by 44 per cent. As in the case of the cotton industry just over 50 per cent of the value of exports is used to make garments, blankets and towelling, and just under half exported as yarn or fabric. This is a remarkable achievement for an industry which until 1970 was selling more than two-thirds of its product on the domestic market.

The surge came in the period 1971-73 and was closely associated with an increase in production of acrylics. By 1979 only 36 per cent of production was consumed locally. By 1972 synthetic yarn already constituted 75 per cent of yarns produced by the industry (by weight) rising to 87 per cent in 1975. Since that date there has been a steady rise in woollen yarns so that synthetic yarns are back to 75 per cent. The tripling of production of woollen yarn is largely a response to the garment industry moving up market into pure wool products. A sizeable proportion of the demand for these products is, however, in the domestic market.

The spinning side of the industry is only marginally more profitable than cotton with only 1 per cent more revenues than expenses in 1978. Fabrics were, however, more profitable with a 4.6 per cent margin over total expenses, slightly higher than the average for all manufacturers.

2.4 Silk

The most traditional of the Korean industries is the silk industry. Silk is the textile that has the strongest backward linkages with the rest of the economy. Raw silk was the third most important export in 1961 and still the sixth in 1971, a measure of the growth of silk production. In 1960, about a quarter of all textile establishments and textile employees worked in the silk

industry. Silk yarns' share of value-added rose from 3.1 per cent to 6 per cent, but the share of fabrics declined rapidly to 1.6 per cent in 1973. By 1978, only 2-3 per cent of textile workers were in the silk industry.

The dualism within the sector is striking. Vincent Brandt's thumbnail sketch of a "handwoven-silk factory" of 1976 shows how conservative small industry can be.[22] After initial problems with quality control in using older silk weavers who had never experienced consumer demand for perfect cloth, the factory progressed satisfactorily, except that one large Korean filature dominated the industry and was able to export all its yarn to Japan, (hence the discrepancy between value-added in yarn and fabric).

The owner, Mr. Ham was referred to as "the reluctant entrepreneur" in that even when markets were guaranteed he refused to expand his business. It would seem that there is little accident that he can only survive in the silk industry. The general impression is that there has been limited change in this section of the textile industry. Kangwha eup still clacks with the sound of silk looms as described by the guide books of the 1960s.

At the modern end of the industry is Dong A Silk Company founded in 1953 and employing perhaps 10 per cent of all silk industry workers. A well run integrated plant in Seoul, and two in the countryside, though using second hand machinery imported from Japan "about ten years ago" which was probably originally made in the 1930s, as well as more modern Japanese and Korean machinery, it has adjusted smoothly to changing markets, from selling about 80 per cent to Japan in 1970 to 50 per cent in 1981, turning from Japanese style fabrics to silk ties, scarves and other silk garments. Only about 20 per cent of the firms' products are sold domestically.

The Japanese market is subject to quota restrictions which may well preserve less efficient Korean firms in business, since the quotas are handed down on a firm basis. One interesting feature of the silk industry is the survival of weaving shibori (Japanese obi) in certain rural high schools for sale in Japanese department stores. Using minimal costs for labour, pupils earn enough to pay for their maintenance and to pay school fees.

2.5 Chemical and synthetic fibres

Although viscose (rayon) has been used in the Republic of Korea since 1910, the first chemical fibre plant to be opened in the Republic of Korea was the Michin Chemical Fibre Co. plant with a capacity for 2 tons per day of P.V.A. line synthetic fibres in 1966. This was of course on a minute scale compared with the 30 tons per day considered to be the minimum economic scale of production in 1979. Indeed a major problem for the Korean textile industry has been the price of domestically produced fibres.

A central part of the first Five-Year Plan was the construction of a rayon (viscose) plant which was completed in 1966 (Heung Nam Synthetic Fiber Company - capacity 15 tons per day). This was a public enterprise controlled through an indirect majority with the Korea Development Bank acting as stockholder. Heung Nam was sold in 1972. Nylon was first produced in 1963 by the Tong Yang Nylon Co. (2.5 tons per day), polypropylene in 1966 by Michin Synthetic Fiber Co. (0.72 tons per day), and acrylic in 1968 by Han-Il Synthetic Fiber Co. (25 tons per day). Polyester was also first produced in 1968 by a much larger plant owned by Dae Han Synthetic Fiber Co. (60 tons per day) and acetate by Sun Kyung Chemicals.

Prior to 1968 most of the raw materials for these plants had to be imported from Japan. The creation of a refining and petrochemical industry was a major part of the second plan and the ratio of imports to total demand fell from 83.8 per cent in 1967 to 35.1 per cent in 1972 and 9.1 per cent in 1979. Production of chemical fibres, however, failed to keep pace with rising demand in the textile industry until 1974, the first year in which total imports fell.

Figure 4.1 shows the development of output, imports and exports. This is a variant on the famous "Gankoo-Keitai" (flying geese) pattern of product development identified by Kaname Akamatsu.[23] What is interesting in the Korean context is the early shape of the curves. Whereas in Akamatsu's theory sufficient imports of a commodity provoke domestic production, in the Republic of Korea imports of chemical fibres were negligible until domestic production began. This was the result of the absence of an industry using such fibres until the deliberate creation of one largely through Government planning. The second unusual feature is that the domestic production is more expensive than

the imported product and exports could only take place under subsidised conditions.[24] Imports continue of those products for which domestic demand is small: cupra, special filament and wig modacrylic. Viscose S.F. imports were replaced by the Wonjin Rayon Co.'s new plant in 1976.

The major problem for the industry is the price of Korean made raw materials which remain higher than world prices because of the small scale of production facilities. The average Korean chemical fibre plant has a capacity of 55.5 tons per day, with acrylic plants producing an average of 173 tons, but polyester producing only 48 tons per day.(See Fig. 4.2)

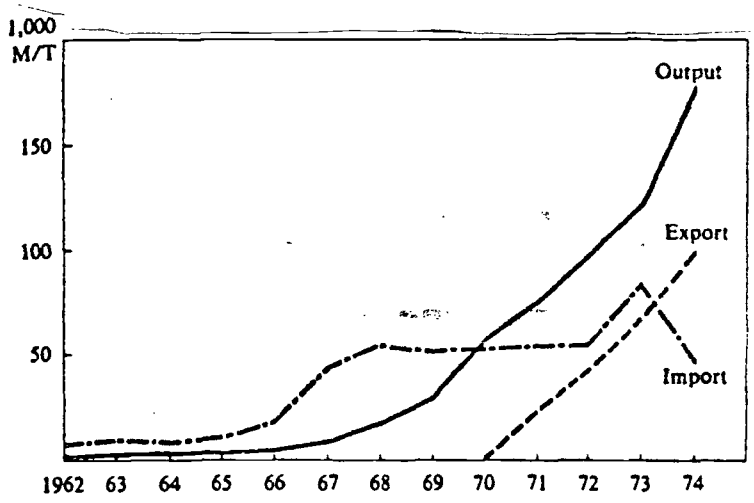
The size of plant poses an interesting problem for countries following a Korean style strategy. Korea was anxious to accelerate industrial development and to reduce foreign exchange pressures. However, the scale of domestic and projected export requirements was too small to permit large plants to be built and operated immediately. Should the early plants have been build at all ? Throughout the 1960s a continual debate about new industries and the scale of new plants persisted. POSCO Iron and Steel Plant was finally constructed on a scale twice as large as originally envisaged. But in the case of the chemical fibre plants, although foreign loans were involved, there seems to have been only limited pressure to increase the scale of each investment.

Nor was economic success guaranteed. Neither Michin, nor Heung Nam were in existence as companies by 1980.[25] What appears to have been a failure in planning is that too many plants were built. By 1980 there were 11 polyester plants and 6 nylon plants, compared with 22 and 11 for the whole of Japan and 5 and 6 for the United Kingdom[26] Since scale is important, then a reduction in the number of plants would have been desirable. But a further problem is the scale of Korean refineries which make oil downstream products expensive, so that the raw material is more expensive than for the Republic of Korea's competitors.

One reason for the large number of polyester plants seems to have been a desire by the textile giants not to be dependent on a rival for supplies. As it was in 1968 the operation ratio of the chemical fibre plants was only 47.7 per cent and rose to 99.1 per cent in 1973. By 1978 they were operating at above their rated capacity, 126.7 per cent and 120.5 per cent in 1979.[27] At this rate man-made fibres were the most profitable of any spinning sector with a 5 per cent margin above total expenses, although the weaving sector was slightly less profitable than for woollen fabrics.[28]

Figure 4.1

Growth pattern of chemical fibre production



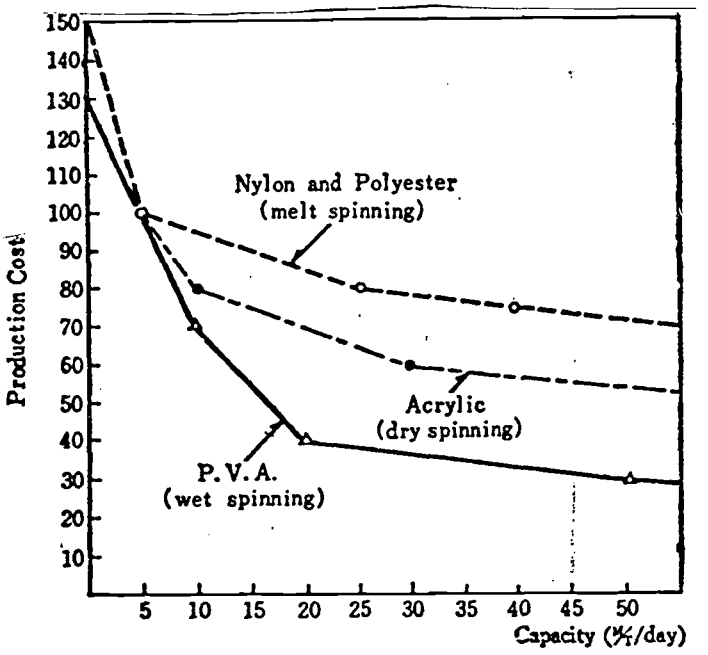
Notes: Export indicates net amount of export, that is the difference between domestic production and consumption. Export includes local supply for export.

Sources: Korea Federation of Textile Industries, Textile Yearbook, 1976;
Korea Federation of Textile Industries, Textile Industry Statistics, 1976;
Korea Chemical Fiber Association, The Chemical Fiber, Various sources.

As quoted in Park Chong-ki, Macroeconomic and Industrial Development in Korea, p. 225.

Figure 4.2

Economies of Scale in chemical fiber production



Source: The Synthetic Textile Industry in Japan.

As quoted in KDI, Long Term Prospect for Economic and Social Development,, p. 286.

2.6 Garments

Despite its importance, the garment industry has been much less intensively studied than the rest of the textile industry. Yet garments constitute about 2/3 of textile and garment exports by value.[29] Table 4.7 shows that by 1975 50 per cent of non-knitted clothing and 60 per cent of knitted wear produced in the Republic of Korea was exported. It should be remembered that these figures are by value at producers' prices and not a reflection of consumer spending.[30]

Figures for early clothing exports suggest that until 1965 there was a typical hunt for "winners", with small quantities being exported in all directions. This process was much more difficult in the case of garments than yarn and fabrics since clothes are dependent on fashion, style, average size of the consumer etc. in the importing country. The early winner was in the form of undergarments, principally to Japan and through Hongkong. In this process, the role of Japanese and Hongkong trading companies was extremely important, although the early establishment of trading offices in Japan by a number of Korean companies showed signs of Korean initiative.[31]

By 1967 knitwear and underwear constituted 68 per cent of clothing exports. The demonstration effect now witnessed a rapid increase in garment factories operating on the largest scale. In 1966 there was only one factory employing more than 500 workers, and 14 employing more than 200. By 1968 there were nine with more than 500 and 28 with more than 200. By 1973 there were 36 employing more than 500 and by 1978, 81. (See Appendix Table 13).

The initial increase came from large companies usually already engaged in textiles seeking rapid profits which could be reinvested in other enterprises (in 1978 depreciation to total expenses in garments was less than 1 per cent). These were joined by joint ventures with Japanese companies supplying the Japanese market (legal from 1966) after 1969. Moreover American buying offices of wholesalers and retailers dealing in garments were established in increasing numbers in the later 1960s.[32]

The entry of large enterprises led to the rapid development of a dual structure, very large factories aimed at overseas markets and small firms catering for the domestic market and occasionally handling subcontracts for large companies. In many cases the large enterprises used fabrics imported

from abroad. By 1968-69, approximately 50 per cent of clothing exports were performed under bonded processing, but the steady improvement in the quality of the rest of the textile industry and the growth of clothing exporters which produce their own fabrics (or fabric producers which own their own clothing manufacturers - a common historical route) this percentage had been reduced to under 4 per cent by 1979. No more striking testimony to the rapid maturity of the Korean industry can be given and also an important ingredient in the ability of the Korean textile and clothing industry to maintain its overall share in total value-added.

A typical case may well be "S" Trading Company. The President had close associations with a Japanese Trading Company while Managing Director of the State-owned Hankuk Raw Silk Co. under the new export incentives of 1959 set up a trading company listed in 1963 as exporting red beans, rice and cuttlefish and importing yarns, chemicals and textile machinery.[33] Trial ventures in shirts led to major contracts with a United States/importer/retailer arranged by the Japanese trading company which supplied the fabric for these shirts.

In the initial stages "S" subcontracted work to smaller firms providing Japanese machinery, finance and technicians to assure quality control. In 1970 "S" formed a joint venture with his Japanese trading partner and a Japanese fabric manufacturer to produce higher quality clothing including ski-jackets and raincoats to United States merchandisers. In 1972 and in 1974 further joint ventures with Japanese firms were formed, one aimed at underwear for the United States, and the other to Kagen Shirts, a Japanese brand name retailed through the Seiju Department Store Chain.

A United States branch was opened in 1971 which handled imports and sought orders. This subsidiary also urged diversification into electronics, notably watches and "S" Electronics was set up in 1976 with overseas offices in the Netherlands and then other European countries. Although the President has also been President of the Korea Garments Exporters Association since 1971, the philosophy has been to use funds from clothing for more slowly ripening investments, although in 1977 he acquired a Pusan women's wear factory which he has headed ever since. In 1978 taking advantage of the construction boom he created a construction company. The company now employs at least 7,000 workers in clothing.[34] Only in 1977 did the company begin to sell on the open market.

The dichotomy between large enterprises producing solely for the export market, and smaller firms producing solely for the home market is bridged by firms like "S" which are now taking an interest in the local market, and large concerns like Bando Sangsa (since 1974 part of the Lucky/Goldstar Group) and to a smaller extent Cheil Moojik (part of Samsung) both of which have operated retail chain for a long while. A great deal depends on the orientation of the group. Lucky has always had a strong interest in the local market, until 1978 producing the only toothpaste on the Korean market, and with a chain of concessionary shops selling only Bando clothes (or Goldstar electronics). Likewise since the purchase of Shinsegye Department store in 1962, Samsung has had an interest in the Korean market. On the other hand another conglomerate which owns the largest producer of dress shirts in the Republic of Korea (and possibly in the Far East) with a capacity of 500,000 dozen shirts per month does not sell on the local market at all, and the whole production process including teams of agents in the United States is geared to export sales. In building up operations this group has bought up other established companies in its expansion.

Although no figures are available there appears to have been a steady concentration of ownership in the past ten years. It can be seen from Appendix Table 13 that the number of small firms (under 20 employees) increased until 1968 and then contracted steadily. Between 1968 and 1973 large establishments' share of output increased rapidly, but since 1973 although the number of establishments employing more than 500 employees has grown by more than 2 1/2 times, this has no more than matched production increases. The major gain has been by medium sized establishments. But because no figures for ownership are available, the ownership of these medium sized establishments cannot be established.

In the knitwear industry, the number of establishments employing more than 500 has actually shrunk by four and the average size of large firm shrunk from 933 employees to 881. By contrast small firms under 19 have actually increased, despite an increase in the percentage of production being exported.

This is taken to be indicative of the problems of the knitwear industry which in Korean thinking has completed its cycle and is now doomed to decline. In certain lines exports began to decline from the peak of 1973, although in total exports recovered in 1976. The largest expansion has been in the original "winner", hosiery and gloves.

The garment industry has been badly affected by quotas. In 1979, sixteen countries, including the United States, E.E.C., Canada and Australia were restricting imports. This has almost certainly been responsible for the loss of four large factories and the shrinkage of employees in the largest category (see Appendix Table 13). Indeed whereas the garment industry grew rapidly with long production runs in large plants, the future is likely to be geared towards shorter runs of higher quality goods.[35]. In particular there seem to have been a collapse in the knitted outwear sector (32133), the number of large factories declining from 22 to 11, and an expansion in underwear and hosiery.

The Japanese market, without formal quotas on a number of items has remained a major market, although here the Republic of Korea remains a supplier of the bottom of the market. As Ron Dore points out, the "administrative guidance" method of dealing with unwanted imports has been least effective at the bottom end of the Japanese market.[36]

Nevertheless the knitwear industry's troubles are well illustrated by the fact that the sector saw a fall in assets at a time when the textile industry was still investing, and productivity has risen much more slowly than elsewhere. Employment began to fall in 1977 as the future of the industry lay in increasing productivity rather than increasing productive capacity. Older machines, such as flat knitting machines and tricot and rashell warp knitting machines have fallen steeply in numbers. Like other parts of the textile industry there has been a steady switch from natural fibres to domestically produced chemical fibres. While this has increased the quality of the product, it has also increased the problems of competition since the Korean raw materials have higher than world prices.

Consequently knitwear has fallen in importance from 45 per cent of garment exports in 1969 to 28 per cent in 1978. The decline has favoured smaller knit firms dealing in a higher class of product on shorter runs, but illustrates one of the problems of the Korean strategy. During the 1960s and 1970s, Korea developed a special strength in large runs of cheap quality products. This permitted the employment of low skilled labour who required very limited on-the-job training, and limited middle management, since workers could be relied upon to continue to do the same job methodically without questioning it (observers have noted that Korean workers will continue to perform a task exactly as instructed even if it is manifestly incorrect).

Supervision can be left to a minimum, and inefficient use of labour is compensated by low wages and economies of scale.

Shorter runs require more skilled labour and more supervision. They also require more market awareness, possibly more sophisticated machines, and a different class of imports, or aggressive marketing in the importing country.[37] Up to this point, garment manufacturers had led a very simple life. The requirements were specified by the purchasers (or, in the case of Japan, sister companies). The wages paid were at the bottom of the market (over 10 per cent lower than other textile workers), while the hours worked per month were longer, 235 in 1979 compared with 227 in textiles (manufacturing average 225.7), and very little capital was required to set up a business. (See Table 4.8.).

It is popularly believed that garment factories were set up by large conglomerates in order to generate cash quickly, which could be invested elsewhere. Likewise in recent years promising managers have been transferred to other parts of the conglomerates.

One spin off from the importance of the Korean garment industry in attracting foreign purchasers has been the rise of leather and imitation leather garments whose share of garment exports has risen from 3.1 per cent in 1972 to 18.1 per cent in 1978. To some degree this has been the result of quota problems leading to diversification, although Korean leatherware now faces restrictions in all four of its major market areas.

Textile manufacturers are reluctant to quantify the effects of quotas. They specify the major result has been a rise in unit price because the full economies of scale cannot be utilised in many areas. A guess estimate of a 20 per cent increase in the price to Western consumers is quoted. Labour is more conscious of the effect on employment. The effect on labour is two-fold, firstly total employment decreases and secondly the conditions of employees deteriorate as they are asked to accept lower pay increases and, where appropriate, work longer hours.

Those trade unionists in Western countries who complain about unfair competition from low wage countries should remember that the first effect of quotas is to reduce the standard of living of those working in the industries affected.

Table 4.8 Average monthly wage and hours worked

	Textile				Garment				Electronics			
	Total	Regular	Hours	Wage/hour	Total	Regular	Hours	Wage/hour	Total	Regular	Hours	Wage/hour
1970	11,505	11,229	231.5	49.7	9,974	9,382	233.3	42.8	15,213	14,741	215.3	70.7
1971	13,335	13,095	224.7	59.3	12,071	12,000	235.2	51.3	18,632	18,185	221.3	84.3
1972	15,508	15,071	226.3	68.5	14,633	14,491	232.8	62.9	18,980	18,221	213.8	88.8
1973	19,142	18,225	222.5	84.1	14,952	14,194	234.3	63.8	20,243	18,935	212.0	95.5
1974	27,571	25,894	221.1	124.7	19,931	19,316	215.0	92.7	27,848	25,496	205.5	135.5
1975	33,393	31,577	222.3	150.2	25,152	24,381	230.6	109.0	37,898	34,408	203.8	186.0
1976	45,681	42,131	230.7	198.0	35,789	33,906	238.3	149.8	49,833	44,872	212.5	234.5
1977	56,698	51,874	230.1	246.4	45,737	42,875	240.7	190.0	62,223	53,544	209.2	297.4
1978	74,480	68,169	229.0	325.2	60,878	57,026	238.8	254.9	79,240	69,490	218.2	363.2
1979	98,574	90,448	222.2	434	80,478	75,356	235.0	342.4	99,930	87,551	212.5	470.3
1980	121,193	111,561	239.7	505.6	97,489	91,521	242.6	401.85	134,930	117,551	218.	618.9

Source: MOL, Yearbook of Labour Statistics 1981

3. Conditions of labour and labour organisation

The National Textile Workers Union has for most of the period under consideration been the largest union in the country, though in 1980 it was marginally overtaken by the Chemical Workers Union. It is regarded by the Korea Employers Association, the Korea Federation of the Textile Industry and others as a strong union, despite the fact that 80 per cent of its members are women and only 27 per cent of workers in the industry according to the Ministry of Labour figures are members. Moreover, certain leading enterprises, most publically Samsung, refuse to permit unionisation in their establishments.[38]

In what way can it be considered strong? It cannot bring the whole industry to a halt through a strike, nor can it achieve the wage claim it makes. Its strength lies only within certain parameters and presumably in comparison with other Korean unions. Undoubtedly the most important parameter is the large number of competing employers within the textile industry. After labour militancy in the mid-1960s, in 1967 the union won the right to negotiate nationally with the National Spinners' Association for minimum wages, but reserved the right for local branches to further the interests of their members as the maximum.

Only one other Korean union had this system of bargaining, the National Bank and Financial Workers' Union, where the room to manoeuvre was limited by the tight control the Government had over the banks. As in other unions the attempt of the Government to take over the leadership of the union was evident (in 1980 the head of the Textile Workers Union was one of the first to be dismissed by the union members) but because of the strength of the branches and the number of women officials in the union, conventional pressures were much less effective.

The major struggle in recent years has been to unionise the very small firms in the garment industry centering around the so-called Peace Market in Seoul, "sweat shops" producing low priced garments for the domestic market. The effort began in the early 1970s led by Chon Tae-il who despairing of this struggle burnt himself publically to death in 1972. This formed the basis of the present drive under the figurehead of his mother (known simply as Mochin-Mother). Strikes are most commonly to be encountered in this district. The major problem is that the workers are new recruits to industry

and union activists remain outside the firms (any found within are normally fired). Under the new Labour Laws of 1980 this type of union activity became illegal (all unionisation must come from within the firm) an example of an area where the new law has seriously impeded any efforts by workers to improve their conditions through collective action.

It is important to keep this in perspective, for critics of South Korea often confuse the blatant exploitation of workers producing for the domestic market, with those for export production.[39] In general, export workers enjoy much more favourable conditions in the large firms made possible by export orders (though some doubts surround those in the Masan Export Zone). The question therefore arises, given that in many areas large enterprises have surplus capacity which could sell superior items at comparable prices on the domestic market, why does the Peace Market and other such small-scale enterprises still exist? The answer is complicated. Two mains reasons appear to be important. One is the complex regulations which govern industries producing for export, which would lead to excessive interference if such firms also sold on the domestic market. Secondly, the fact that those firms which do market domestically can, by limiting the quantity sold, achieve much higher prices. Shirts sold in Bando retail stores may sell at 4 times the export price. Consequently these firms leave a large gap in the market for lower priced, lower quality, products, produced cheaply not through economies of scale and efficient use of labour, but by sweated labour using new recruits to industry.

Table 4.8 gives official figures for the average number of hours worked and wages in the industry over the past ten years. There are problems in comparisons between manufacturing as a whole and textiles because of the high percentage of women employed. On average wages in textiles were 80 per cent of the national average, and since 1972 the number of hours worked per month has been 1-2 hours longer than average. The wages in the garment industry averages 70 per cent or less of the manufacturing average and the number of hours worked except in 1975 have exceeded the manufacturing average by 10 or more hours in most years.[40]

More important perhaps than wages is the problem of occupational diseases. The MOL suggests an average of 362 deaths and 9,500 physical disabiities per annun in the whole manufacturing sector. A survey conducted by the Korea Trade Union Federation concentrated on hearing loss in textile

factories. This suggested that hearing loss was experienced by nearly 24 per cent of workers working for 5-10 years in the textile industry, and by 14.1 per cent of workers with one to five years of work. The survey showed that manufacturers normally provided ear plugs in textile companies but workers did not wear them (a common problem in promoting industrial safety in the Republic of Korea) but that garment manufacturers did not even provide ear plugs. The noise levels in both industries were at a level where hearing loss could be experienced if sustained for nine hours at a time.[41]

It is commonly observed that Koreans are not "noise conscious" and are therefore unaware of hearing loss dangers. It would appear that more positive measures need to be taken in this respect.

4. The Government and the textile industry

In the early 1960s the Government was faced, particularly in the cotton industry with an exceptionally strong organisation, the Spinners and Weavers Association. Their position was strengthened by the importance of P.L.480 negotiations for cotton imports. Thus unusually in the Republic of Korea, the Government found itself in a situation with an industrial organisation stronger and more knowledgeable than itself.

The situation changed by the mid-1960s with the rise of other sectors within textiles, the need for Government finance and support for chemical fibre plants and the general strengthening of the Government's position. In 1967 as part of the consolidation, an overlord quasi-agency was created, KOFOTI (Korea Federation of Textile Industry) which would organise the 18 sectoral associations such as the Spinners and Weavers Association, the Korea Worsted Spinners and Weavers Association, the Korea Clothing Industry Cooperative, and the Korea Garment Manufacturers Association.

This was to liaise with the Textile Bureau of MCI and an exceptional committee set up under the Law on Interim Measures on Textile Industry and Facilities of March 1967 (amended in December 1975). This law set up a deliberative committee with representatives from the Ministry of Finance, the Korea Development Bank the Korea Medium and Small Industry Bank and the Foreign Exchange Bank. The latter was to ensure a smooth flow of loans to manufacturers to improve their equipment (a major aim of the law which permitted the Government to loan or subsidise "a part of the capital needed to

replace obsolete or worn facilities"). KOFOTI was later given the major part in negotiating and policing both MFA and bilateral textile quotas.

The measure creating KOFOTI was the major intervention of the Government to develop the industry, followed by similar measures the following year to promote the electronics industry. The Goverment was claiming by 1968 that the move to build large plants, noted above, was inspired by these measures. Most businessmen comment on the ease with which funds were available at this time.

By 1976 the textile industry was given a much lower priority under the Fourth Plan, the main emphasis being on increasing chemical fibre production, replacing old and obsolete equipment and developing design capabilities and dyeing techniques along with active sales promotion. MCI attempted to link this to the growth of a domestic textile machinery industry. This seems to be universally regarded with suspicion inside the industry. The pressure to replace older foreign machinery with domestic machinery was intense, but the general report until very recently has not been favourable to Korean machinery.

In general wherever the owner was closely supervising his factory or where large companies were involved the pressure was resisted. In one thread company domestic machines were acquired on trial but promptly sent back. KOTOFI reports considerable resistance. In 1979 a further Law for the Modernisation of the Textile Industry was enacted whch was to further assist in the modernisation of the industry with funds which had not previously been made available except to buy domestic machinery.

Although the tenor of recent documents about the textile industry has implied that the textile industry has been deprived of funds, a survey of banking data suggests that the textile sector has received a proportional share of all loans from commercial banks and only in terms of loans directed through KDB has it fallen behind. This appears to be the result of the importance of mandatory credit to holders of L/Cs and other export oriented initiatives. For instance in 1976, the textile industry obtained a share of loans and discounts approximately comparable to its share of industrial value added, but a much lower proportion of these funds was for equipment, 15.7 per cent, compared with 23.8 per cent for the machinery sector. The large disparity, however, was in funds from the Korea Development Bank which was being used to build up the machinery sector. At the same time, even the

Korea Development Bank was lending to the textile industry. By 1978 the textile industry received just the same percentage of total loans and discounts to manufacturing, but only 13.2 per cent went on equipment, compared with 27.2 per cent to machinery.

5. The future of the textile industry

In 1980 exports of textiles dropped to 31 per cent of total manufactured exports, but provisional figures for 1981 suggested a recovery to the level of 1979 of 33 per cent. This compares with the Fourth Five-Year Plan projection of only 23.4 per cent for 1981. During 1978 and 1979 the textile industry suffered severely from the overvalued won. Not only were Korean textiles more expensive than their competitors products, but the delivery price was unstable due to rapid inflation. Importers seemed tolerant of slightly higher prices, their competitions reflecting the institutional costs of finding a new supplier in another country, but unwilling to handle increasing prices from delivery to delivery.

Despite this, the textile industry had performed much better than predicted, (and heavy and chemical industry rather worse). There had been a tendency for Government circles to write off the textile industry too early, and recognising this, a "Law for the Modernisation of the Textile Industry" was passed in December 1979, recognising KOFOTI to be the statutory entity for carrying out the modernisation of the Korean textile industry. Thus in the textile industry, unlike the electronics industry as will be seen, the quasi-Goverment agency appears to be strengthening its position. This may well be a reflection of the much larger number of firms involved in textiles compared with electronics. It is also the result of external influences such as MFA negotiations which demand a cooperative approach which only KOFOTI can offer.

Current projections suggest that textile exports will fall to 24 per cent by 1986. This may well be correct. Much depends on the bilateral MFA agreements, but there is no sign that the world textile market will grow less restrictive, nor that there will be a major surge of world demand for textiles. World over-capacity is likely to keep profit margins very low. The Republic of Korea's textiles are having to adjust to new LDC entrants to textile exporting at the bottom end of the market, and having to increase the quality of the product in terms of technique, style and diversity.

There is still room for increases in value-added through higher value items and domestic raw materials replacing imported ones. To a large extent this rests on an increase in the expertise in the dyeing and finishing industry where many smaller plants still have serious problems in maintaining consistent quality. As far as styling goes, the Republic of Korea has been licensing items at the very top of the market, like Pierre Cardin, Christian Dior and other names which are more likely to appeal to the conspicuous consumption oriented upper classes of the Republic of Korea than the overseas customer of the Republic of Korea goods. There are good designs in the Republic of Korea but they are produced by small workshops for domestic retailers rather than for export. They would sell well in Western boutiques and high street retailers, but exporters are either dependent on importer dictated styles or concepts of what Westerners wear based on Paris fashion shows.

Medium size plants appear to have grown past the management barrier of the early 1970s and the plants themselves seem in good shape. Visitors familiar with conditions inside United Kingdom textile factories say that Korean conditions of such enterprises as Dong A Silk are cleaner, quieter and with less obvious hazards. DongA's main problem is in finding customers, waiting for importers to come to them, rather than exploring new markets. One might suppose that the diversity of interests beyond textiles may also limit management. Like "S", DongA has diversified over the years, with its own trading company, a wool textile company, a silk filature company, an industrial gases plant, a window glass plant, a development company, a shopping centre and a high school.

This diversification must have implications for the future of the textile industry as a whole. Whereas once profits may have flowed from textiles to other investments, it is doubtful if this continues, rather other enterprises may be subsidising textiles, at least in paying for certain overheads. What effect this has on entrepreneurial psychology is unclear. Will entrepreneurs prefer to maintain their "empire" or readily liquidate less profitable concerns?

These factors will shape the future of the Korean textile industry. In theory the Republic of Korea must now be entering the stage where the textile industries' share of value-added declines as it did in Japan during the 1960s until it finds a new level (in Japan's case around 9 per cent). Whether this

happens rapidly or slowly depends on the factors mentioned above. In either case there are not likely to be very extensive increases in employment, all the pressures being towards a smaller and more skilled workforce. However, a rapid rundown could increase unemployment.

6. The electronics industry

6.1 Overview of the industry's development

The electronics industry is commonly stated to have begun with the Gold Star radio factory completed at Pusan in 1959. However, the electrical industry has a long pre-history dating back to 1918. In the 1930s, Korea was exporting light bulbs on a large scale and during the dispersion of Japanese industry in the 1940s substantial investments were made. Most of these investments decayed under the United States Military Government and the chronic power shortages after the supply of electricity was cut off by the North Koreans in 1948. Only in 1961 did the transformer production exceed the level of 1944. By 1962 domestic production of many items approached domestic demand.[42]

The Goldstar factory was the largest employer within the electrical industry, doubling its employees to 1,600 in 1962, and likewise its production of radio sets. In a typical Korean fashion the imports of small radios were banned in December 1960 to protect the domestic market, and two more transistor plants were set up in 1961-62, Taiyand and Samyand. Both were set up under the technical guidance of Japanese companies (Matsushita and Sanyo) although relations with Japan were not yet normalised and joint ventures not legally possible. By mid-1962 Goldstar had fixed up a contract to export 5,000 transistors with a New York mail order contract firm which was to be concluded as soon as the firm could find out how much export subsidy it could obtain from the Government and could thus fix an export price.[43] Two hundred samples were also sent to Hongkong to interested importers. There it was reported that the korean production costs were "much higher" than in Hongkong. Wages were at about the same rate, but productivity lower, unskilled management practices, higher interest rates and costs for electricity and transport.[44]

These early export experiences illustrate something of the export fever in the Republic of Korea in 1962, the necessity of export subsidies and to exporting at a loss to establish markets.

Nevertheless the major initial impulse was to substitute domestic products for imports to serve the local market. The Republic of Korea was described in 1962 as a broadcast rich nation with seven networks operating from the capita. In the same year domestic production of "luxury" radios was judged sufficient to ban imports.

Exports of radios reached their peak in 1966, not to be surpassed until 1969. This was presumably due to changes in demand in their major market, the United States. However, the attractiveness of the Republic of Korea as an off-shore assembly base was apparent from 1966 onwards. A succession of United States firms such as Motorola, Signetics (1966) Fairchild Semiconductor and Control Data, (1967) was followed by a series of joint ventures between Japanese firms and Korean operations.[45] The best indication of the importance of foreign enterprise in this sector is the percentage of bonded processing of total electronics exports in 1970 which amounted to 80.8 per cent compared with 18.2 per cent for Korean exports as a whole.[46]

Table 4.9 illustrates the change in the balance of the industry. In 1968 foreign firms were responsible for 71 per cent of exports and local firms for 21 per cent. By 1972 joint ventures were in operation which produced 18 per cent of exports, while the share of wholly foreign owned companies had fallen to 55 per cent and wholly Korean firms share had risen to 27 per cent. Between 1972 and 1975 all three types expanded rapidly, but the most rapid were joint ventures which reached 23 per cent of exports. By this date there were 190 foreign companies and joint ventures authorised to operate in the Republic of Korea, 26 United States, 5 from other countries and 159 from Japan.[47]

Table 4.9 Electronics exports by product group and company classification

(In million US dollars)

	Production Group			Total	Company Classification		
	Consumer Electronics	Industrial Equipment	Parts & Components		Local Firms	Joint Venture	Foreign Firms
1968	3.6 (18)	0.1 (1)	15.8 (81)	19.5 (100)	4.0 (21)	1.7 (8)	13.5 (71)
1972	27.9 (19)	11.0 (8)	103.2 (73)	142.1 (100)	41.1 (27)	22.5 (18)	77.6 (55)
1975	198.3 (24)	35.8 (6)	347.8 (60)	581.9 (100)	151.8 (26)	134.5 (23)	295.6 (51)
1976	389.8 (38)	56.2 (5)	590.8 (57)	1,036.9 (100)	318.2 (31)	235.6 (23)	483.0 (46)
1977	455.7 (43)	63.0 (6)	545.0 (51)	1,063.7 (100)	354.1 (33)	197.4 (19)	512.2 (48)
1978	654.2 (48)	102.5 (8)	602.5 (44)	1,359.2 (100)	525.2 (39)	249.9 (18)	584.0 (43)
1979	914.5 (50)	110.7 (6)	820.2 (44)	1,845.4 (100)	839.1 (45)	268.5 (15)	737.7 (40)
1980	984.9 (49)	114.7 (6)	914.2 (45)	2,003.8 (100)	954.1 (48)	300.5 (15)	749.2 (37)

Source: Korea Exchange Bank: Industry in Korea, Seoul, 1981.

Note: Numbers in parentheses denote ratio to the total.

After 1975 the most significant feature of the industry has been the rise of Korean firms in the export business so that by 1980 they were handling 48 per cent of electronics exports. Exports constituted 33.9 per cent of production in 1968 and reached a peak of 72.9 per cent in 1976. The rise of a mass domestic market for a sophisticated range of electronics inside the Republic of Korea thereafter and to a certain extent trade barriers, led to a steady fall to 59.9 per cent in 1978 and 56.2 per cent in 1979. The deep domestic depresssion in 1980, however, pushed the share of exports up to 70 per cent of a reduced output.[48]

This role for the domestic market, summarised in table 4.10, illustrates the thesis that, even in the most export oriented of the Republic of Korea's industries, the long-term role of exports can be overstated. During the early 1979s their importance was paramount, but since 1976, until the current recession, the domestic market was showing every sign of being an icreasingly important force. Unlike textiles, the Government has taken a strong lead since the introduction in 1969 of the Electronics Industry Promotion Law which recognised electronics as a "strategic export industry" with its own eight year development plan.

Table 4.10 Production Share of Domestic and Overseas Markets for Electronics

	Overseas	Domestic
1968	33.9	66.1
1972	49.9	50.1
1975	67.6	32.4
1976	72.9	27.1
1977	62.0	38
1978	59.9	40.1
1979	56.2	43.8
1980	70.2	29.8

Source: Electronics Industry Association of Korea.

6.2 Industrial structure

Table 4.1 shows the development of the electronics industry within the context of the electrical industry. Whereas in 1960 the textile and clothing industry already had over 4,100 enterprises and 96,000 workers, the entire electrical industry had only 129 with 4,458 workers. By 1970 the electronics industry alone had 142 companies and 475 by 1976. The growth of large companies has been particularly dramatic, from eight with more than 500 employees in 1970 to 72 by 1978, with a corresponding growth of employees in such establishments from 9,631 to 108,955 in less than ten years.

Despite the Government's efforts to promote other sections of the electrical industry, the other sectors (electrical machinery and domestic appliances) have made no such strides. In 1980 77 per cent of establishments with over 500 employees and 78 per cent workers in classification 383 work in 3832, electronics. However, the number of establishments in branch 3832 is only 48.8 per cent of the total in 383. In other words the average electronics establishment has 242 employees whereas the average establishment in the rest of the electrical industry had only 95.5. Both are larger than the average in textiles (87) and garments (72) but this is largely a reflection of the dualistic structure of the textile and garment industry and the fact that there is a much higher entry cost in terms of capital investment in the electrical industry than in textiles.[49]

Appendix Figure 15 shows that in 1973 the electronics industry was experiencing similar production problems as the textile industries in that medium sized firms of 50-200 employees were getting no benefits from economies of scale compared with small or very large companies. However, unlike textiles these problems persisted into 1978 with companies in the 400-500 category achieving half the value-added of those over 500, and 25 per cent less than those below. In addition to managerial problems must be added the explanation that many plants were running at well below capacity. The average operation ratio was 55.2 per cent, as Table 4.10 shows.

One can hardly expect employment in an industry to grow by 919 per cent in less than ten years and make the jump from simple assembly of imported components to the manufacture of complete electronic items without considerable managerial problems. The Korean miracle consists to a large

Table 4.11 Production capacity of major products

(in million dollars, %)

	1974			1978		
	Production Capacity	Production	Operation Ratio	Production Capacity	Production	Operation Ratio
Consumer Electronics	530.1	258.5	48.8	1,948.3	936.2	48.1
Radios	124.9	61.3	49.1	170.7	61.2	35.8
B/W TV	159.6	104.3	65.4	380.0	292.9	77.1
Color TV	13.7	5.2	37.7	188.2	85.4	45.4
Cassette Tape Recorders	95.4	43.9	46.0	144.7	82.8	57.2
Car Stereos	15.2	3.9	25.5	82.8	31.6	38.1
Phonographs	14.7	7.4	50.2	33.5	25.7	76.7
Amplifiers	71.2	27.6	38.8	393.7	106.2	30.0
Industrial Equipment	178.1	76.5	42.9	364.6	210.2	57.7
Telephones	11.6	6.5	56.2	55.2	18.6	33.6
Telephone Exchanges	49.3	21.3	43.3	87.6	53.4	60.9
Calculators	45.3	20.8	45.8	54.4	34.7	63.9
Parts and Components	711.9	478.6	67.2	1,800.0	1,124.8	62.5
Electronic Tubes	55.8	29.0	51.9	92.5	77.9	84.2
Semiconductor Devices	167.8	114.2	68.1	226.9	136.2	60.0
IC	162.4	158.7	97.7	259.0	235.8	91.1
Musical Equipment Parts	29.1	13.7	47.1	98.5	88.1	89.4
Equipment Parts	25.7	16.8	65.5	95.4	59.8	62.7
Total	1,420.1	813.6	57.3	4,113.0	2,271.1	55.2

Source: The Electronic Industries Association of Korea.
As quoted in Korea Development Bank:
Industry in Korea 1980, p. 96.

extent of precisely the ability to achieve this sort of development with a minimum of mistakes.

Although the textile and garment industry received large inputs of technology and managerial skill from foreign companies, and a considerable amount of foreign investment (99.7 million dollars for textiles as against 131 million dollars in electronics) there is a sense in which the textile industry can be considered to be basically developed by domestic energies.[50] In the case of electronics the role of foreign investment was central. What is unique in the case of the Republic of Korea is that the past tense is necessary. In less than ten years the dependence on foreign investment and joint ventures has dropped away from an almost total reliance. Foreign investors are now scared of high labour costs, and withdrawing from basic cheap labour sub-assembly jobs, especially from the export processing zone at Masan where numerous factories were standing empty by 1980. The future of the electronics industry therefore lies in the hands of domestic companies.

In understanding this process it is important to remember that several Korean firms, notably Goldstar, were already significant manufacturers for the domestic market from the early 1960s. Further, local companies never lost control of the growing domestic markets. Goldstar, part of the Lucky Group, is now one of the three largest electronics manufacturers.[51]

Already in 1974 domestic investment was beginning to rise, and when investment resumed after the oil crisis, domestic firms emerged as the dominant investors.[52] This would not have been possible given the Government control of credit without strong Government support (as will be seen in the next section).

The process by which production and investment shifted from foreign to domestic firms is most complete in consumer electronics and least complete in the manufacture of parts and components. Further the Korean industry is only just beginning the third stage of maturity as examplified in the schema of 4.12.

Table 4.12 Development of the electronics industry

Stage 1	Stage 2	Stage 3	Stage 4
Assembly for Local Market	Direct Foreign Investment	Domestic Mastery of Existing Processes Technology Licensing	Producing at the Frontiers of Existing Technology

At stage 1 the level of technology is relatively unimportant, since the domestic market is protected. However in the case of the Republic of Korea, through agreements with Japanese companies, the technology even at this stage was good enough to allow limited exports. The transition from the second to third stage was greatly facilitated by the transfer of skilled local staff from foreign firms run in United States or Japanese style to domestic firms. From interviews it seems that most production executives commenced work for foreign firms and then turned to domestic firms bringing with them their technical skills.[53]

The following stage, which the most advanced domestic firms, notably Goldstar and Samsung, are entering is to produce new products. Samsung is completing work on a VTR which will make the Republic of Korea the fourth nation in the world to produce video recorders. Samsung has produced videotape; Samsung, Goldstar and Korea Electronics are all beginning wafer production which will give the domestic parts and components manufacturers a much larger share of production (and cut down imports).

The problems at stage 3 cannot all be solved in this way. Advanced countries have often been reluctant to give Korean company licensing agreements. The problems of controling joint ventures was raised above. The promotional literature states "in principle up to 50 percent foreign equity investment will be allowed ... local partners must hold more than 50 percent of the total shares in the following types of projects:

1) purely labour-intensive;
2) purely bonded processing;
3) dependent on domestic resources for major raw materials;
4) oriented towards local market sales".[54]

At least in electronics companies local plant managers appear to exercise complete control by the 1980s, clearly a great deal depends on the nature of the enterprise and the initial bargaining about employment of foreigners. In the electronic components firms the tendency has been for the Vice-President to be a foreigner, but for no other foreigners to be employed once the process is set up. In Korea Electronics, a joint venture with Toshiba, the Japanese set up the factory with production lines "just like Toshiba's factory", and handled the export of production into Japan, but appear not to interfere in the running thereafter as long as the product is supplied at the right price.

Nor apparently can they control the export of parts in competition to the parent company. In the Korea Electronics' case the control has been exercised by refusing to sell more machines to increase semi-automated production line capacity. As a result Swiss machines have been imported, but have proved not to provide the level of accuracy. In Goldstar, however, where the output is consumed largely in the rest of the group and the joint venture is with Western Electric there seems to be no problem about obtaining machinery, United States machine producers being happy to sell their machines with the aid of United States Exim bank.[55]

Although the machines are available, the local staff have trouble getting the right level of skill in operation to obtain a satisfactory rejection rate. The present level of rejection is unacceptably high and probably requires closer supervision from trained Western engineers to help the existing staff reach the right process. Viewing various joint ventures there seems little doubt that these are essentially Korean firms assisted with Western capital, technology and then running themselves.

Apart from technology, the major problem is the question of scale of investment. As table 4.11 showed, with the exception of IC, Musical Equipment Parts, Electronic Tubes, B/W Tvs and Phonographs, all of the industry was running far below capacity. In other words there had been over-investment and a misjudging of the market. Although difficult to quantify quotas and non-tariff barriers can only be responsible to a limited extent since only a limited number of products have been affected in a limited number of markets, notably the United States quota on colour televisions introduced at the end of 1978, just when the colour television industry in the Republic of Korea was getting into its stride. This was already only functioning at 45 per cent of capacity, and fell to 30 per cent. It should be noted that this was largely because of the refusal of the Government to permit the sale of colour televisions on the domestic market, one of the more revealing conflicts within Government policy and illustrating some of the contradictory thoughts about the domestic market.

If the problem displayed in Appendix Figure 15 were the result of overcapacity, then the reason why this did not affect firms over 500 needs to be explained. A suggested partial explanation is that established companies were reluctant to shed labour, and that medium sized companies were top heavy with office staff, all suggesting serious organisational problems with a shortage of experienced executives at the managerial level.[56]

A further feature of the electronic industry is that domestic value-added in the electronics industry had shown no signs of increasing since 1973. In other words, despite the increase in the share of domestic firms and expansion of the parts and components industry, this process had not increased the share of value-added. Although the profits might now remain in the Republic of Korea, the domestic firms contributed no more to total value-added in the manufacturing sector than foreign firms.

From this point of view the appearance of a transition to stage 3 and 4 is partly illusory. As Table 4.13 shows the industry is still heavily dependent on imported components, notably for sophisticated processes such as coloured televisions. The development of domestic technology and production of such items is a task for the 1980s and Korean firms were claiming to have solved the colour tube problem. But in developing such techniques Korean companies are always likely to find that they cannot match the scale of Japanese or United States producers who have much larger domestic markets. Thus, as in the textile industry, it may turn out that value-added can only be increased at a higher unit cost than importing the original component.

7. The Government and the electronics industry

In 1960 the Government adopted the electronics industry as a strategic export industry and enacted the Electronics Industry Promotion Act formulating policy measures for government assistance which included protective measures for the industry.[57] The most important measure was the creation of an eight-year electronics development plan (a considerably more detailed measure than for the textile industry where the flow of funds was the main purpose) and the creation of an agency which would promote the industry, including organising the Korea Electronic Show, held for the first time in 1970. This agency was named somewhat misleadingly, the Fine Instruments Centre. In 1979 the centre was absorbed in the Electronics Association to form the Electronic Industries Association of Korea which has taken over all its former functions.

The FIC was therefore the quasi governmental agency which would be responsible for implementing Government policy. From the start overseas offices were located in New York, Tokyo, Bonn and San Francisco under the KOTRAKTA umbrella with the major purpose of attracting foreign investors. The role of FIC in actually producing foreign investors is difficult to

Table 4.13 Supply and demand for the electronics industry

(in million dollars)

	1968	1972	1976	1978	1979	Annual Average Growth Rate (1968-79)
Total Exports of the Nation (A)	455	1,624	7,751	12,711	15,055	37.4
Total Imports of the Nation (B)	1,463	2,522	8,774	14,972	20,339	27.0
Total Demand	95.9	384.5	2,271	3,335	4,744	42.5
Domestic Demand (C)	76.5	242.5	1,235	1,976	2,899	39.0
Exports (D)	19.4	142	1,036	1,359	1,845	51.5
Domestic Production (E)	56.1	207.5	1,422	2,271	3,281	44.7
Imports (F)	39.8	177	849	1,050	1,463	38.6
D/A (%)	4.3	8.7	13.4	10.7	12.3	
F/B (%)	2.7	7.0	9.7	7.0	7.2	
D/E (%)	34.6	68.4	72.9	59.9	56.2	
F/C (%)	52.0	73.0	68.7	53.1	50.5	

Source: KDB, Industry in Korea 1980, Seoul, 1981, p. 91.

evaluate. Prior to 1970 one investment project had been established. In the five years after the FIC's establishment there were 179. To attribute this to the FIC would be easy, especially as under 30 investments were made in the following five years when the FIC was presumably even more efficient. But the FIC could only have helped at the margin, offering feasibility studies for potential operations in the Republic of Korea, market information and market forecast projections etc. At the least it showed that the Government was serious in its intentions and offered an initial point of entry into what is, after all, a difficult country to establish investments from the point of view of innumerable regulations, mostly not translated into English, and open to ambiguous interpretations.

The FIC also had a role in qualifying technicians and testing the quality of the products. It also negotiated agreements with quality control agencies such as the Canadian Standards Association, the British BSI and japanese JMI which would ensure that exports from the Republic of Korea met the minimum requirements in importing countries. This included testing instruments in factories. Perhaps most important, they conducted a two-year training course at the Junior College level and short term courses for technicians and engineers covering the electronics field.

The eight-year plan ended in 1976 and was succeeded by the targets of the Fourth Five-Year Plan. In this the electronics industry was listed as the second most important sector under the plan (the first was the machinery industry). Ambitious targets were set for exports and 56 items were selected "on the basis of product life-cycles and comparative advantage", including "semi-conductors, computers and related items". Thirty-one of these were defined as for "strategic development" and 25 as "key items". Eight general policies were enunciated:

1) Boosting the electronics industry as a leading export sector and diversifying export markets.

2) Promotion of technical development and renovation.

3) Strengthening of competitive power in international markets through conformity with electronic products of superior quality.

4) Development of Korean models and renovation of designs.

5) Standardisation of products in order to cut down the cost of production and achieve a mass production system.

6) Active inducement of foreign investment and international specialisation and introduction of foreign capital support and techniques.

7) Realisation of industrial rationalisation through improvement of manufacturing techniques and production processes.

8) Increase the use of locally-made parts and raw materials.[58]

The main aim of the plan was to encourage the change from stage 2 to stage 3 which would include the special encouragement of the semi-conductor industry since "the electronics industry will change structurally from an assembly-type production to one which mainly produces basic components and parts".

As part of this process, a semi-conductor and computer industrial estate was announced. None of the companies involved can have liked this idea, and ultimately the existing electronics and textiles estate at Kumi was designated. Even so, Samsung Semi-Conductors refused to consider moving to Kumi from Suwon where it was next door to its partner, Samsung Electronics. Thus only Goldstar, which had all its sister companies at Kumi, and Korea Electronics moved to Kumi. Nevertheless in 1980 the Government proceeded to move the Korea Institute of Electronics Technology (KIET), founded in 1976, to Kumi on the basis that it would then be next to the relevant industries.

This move incited complaints by Samsung that KIET was favouring its rivals. This included supplying Goldstar with hydrogen from KIET' hydrogen plant, and several firms with low volume runs of wafers from KIET's own facilities. KIET was after all a Government institute supplied with Government funds through the Electronics Industries Association of which Samsung was a member.

This series of events is interesting for three reasons, firstly the ability of companies to resist Government direction in location, and secondly a clear sign that the old order of quasi-govenrment associations was under threat from giant corporations which felt they could do perfectly well without such assistance.[59] Companies wanted to locate related plants together,

rather than according to some tidy-minded bureaucrat's plan of putting all components factories together. The third reason was a dispute over KIET which in many ways is an interesting experiment in developing from stage 3 to stage 4. It is an industrial research institute supposed to be working at the leading edge of manufacturing, developing processes which will not enter production in the first Korean manufacturer for the next 18-24 months. It is also charged with developing the Han micro-computer for educational purposes. Being located next to the industries it serves it can also act as a trouble shooter.

A major function is the design of circuits which will provide indigenous technology. In order to keep abreast of the latest developments, KIET maintains a branch institute in Silicon Valley, United States. Although in 1978-79 KIET developed a stereo decoder and audio amplifier design, the institute is strongly opposed to entering the field of consumer electronics. Theoretically, however, any electronics company could approach the project management department for a quotation for any specific problem.

At present there are many problems in establishing the role of KIET vis-à-vis private industry. If the concept succeeds it will be a valuable tool provided by the Government to lift the industry from stage 3 to stage 4. The feeling in Samsung, and to a lesser extent in Goldstar, is that they are large enough to make the leap from stage 3 to stage 4 by themselves, as indeed Samsung seems poised to do.

However, in its recent change in policy since 1980, the Government has decided that the old preoccupation with domestic industry as opposed to foreign investment needs to be overturned. The reasons were two-fold, first the failure of electronics exports to come anywhere near the target set in the Fourth Five-Year Plan, and second a desire for a much more open economy concentrating primarily on exports. It was therefore felt that any investment was good investment, and the minimum investment limit was lowered, with much greater scope for up to 100 per cent investment.[60] In line with this the Electronics Industry Promotion Law was amended in March 1981 to facilitate development.

Under the Fourth Plan exports were to reach 1.94 thousand million dollars at 1975 prices, or about 3 thousand million at current prices. Final figures for 1981 are not yet available, but in 1980 electronics only managed 2 thousand million.

Moreover, for two years the industry had been struggling with the Government for permission to sell colour television sets on the domestic market. This struggle illustrates the nature of Government thinking on the domestic market in the later 1970s. Investment had proceeded according to the estimates drawn up by the FIC, MCI and other authorities, but demand had not developed on the scale expected. There is no clearer demonstration of the problems the country was encountering in planning exports in the Fourth plan period than the failure of one of the most successful sectors to reach its targets.

It seems clear that exports were being projected at rates required to achieve domestic GNP growth targets rather than at rates realistically adjusted to the conditions in the world market. In particular the appearance of quotas on Korean electronics goods, notably black and white and colour televisions, curtailed sales. The Government, however, refused to permit the sale of colour televisions on the domestic market on two grounds. First it would discourage consumer savings and second it would increase social tensions emphasising the difference between rich and poor.[61]

While the social reasoning was sound enough and very much part of the character of Korean development that ostentatious ownership of wealth should be discouraged, the second reason ignored the fact that it was companies which saved most and consumers least in the Republic of Korea. When finally in December 1980 the restriction was lifted, 544,000 colour sets were sold in a few months, despite the fact that hotels had been able to buy previously (a concession to the manufacturers) and individuals had been able to import by hand.[62] Sales of black and white televisions, however, dropped from 1.6 million sets to 0.54 million in the same period.[63] Some 1.2 million colour sets were sold in the Republic of Korea in 1981.

8. Employment conditions

Employees of Samsung's six electronics companies make up 42.1 per cent of the group's industrial employees.[64] This gives some idea of the employment potential of the industry. In turn Samsung employs about 10 per cent of all workers in the industry, compared with 1.9 per cent of textile workers. Goldstar's share may be as high as 14 per cent of electronics

workers.[65] Most other large electronics, but few have more than 1,000 employees.

Employees in the industry grew by 900 per cent during the 1970s, 65 per cent of them women. Working conditions on the whole are more favourable than in garments or small textile firms. But this is a product of larger and newer factories as much as anything, and in some of the older electronics plants the shop floor looks hazardous with pipes and other objects on the floor. The fumes involved in some processes also tend to affect the whole factory.

Even if the value of exports grows as predicted along with an increase in domestic demand employment in the industry will not increase by anything like its previous rate. This is because in order to keep up with competitors it has become important to automate. Wages are no longer so cheap that employers can disregard labour costs. The share of labour costs in manufacturing is higher in electronics than in textiles or garments by about 2 per cent (1977, 15.42 per cent, 1978, 15.68 per cent) and rising. In particular male wages in electronics are significantly higher than for male textile workers. Female wages rose rapidly in textiles in the 1970s reflecting the tighter labour market and in 1980 actually were higher than for electronics. However, when it is considered that electronics workers work 15-21 hours less per month, the hourly rate is considerably higher than for textile workers.

Within electronics factories, idle lines of old labour-intensive machinery can be seen while their work is handled by a single automated machine which also offers a much higher level of accuracy and therefore also cuts down wastage. The replacement rate is between five and ten production workers in labour-intensive production to one worker afterwards. The production workers are universally women, and the men are given overseer status. Their importance is basically in the area of quality control which is very essential in electronics at every stage of the process.[66]

It will be seen that workers in electronics get much better wages (if male) than textile workers and slightly better (if female). The wage figures are based on Ministry of Labour statistics which exclude small firms which undoubtedly pay lower wages but are more predominant in the textile sector. Conditions for all classes of electronics' workers are distinctly better than for textile workers, especially in Kumi. There, workers are given free housing (as in other industries) but instead of dormitory accommodation,

larger firms offer small apartments shared by two workers, a vastly superior situation to workers in other areas. Textile workers at Kumi appear to still be in dormitories of no better quality than in other places. Goldstar reports this is a major expense but necessary to draw the necessary quality of workers (middle and high school graduates in the case of women). In general, although living costs are higher in Seoul, wages are higher in Kumi as a compensation for not being in the capital.

It should be stressed that the difference is not so much between workers in Seoul and Kumi as far as general conditions are concerned, but between workers in electronics and textiles. But if the conditions of the larger electronics factories at Kumi were the model for the 1980s in all industries, then Korean workers would be enjoying a distinctly better standard of living than in the 1970s.

Electronics workers fall under the umbrella of the Metal Industry Union, which had a membership in 1978 of 128,040 workers; 86,124 men and 41,916 women, about 22.2 per cent of all workers in category 38. As already mentioned, Samsung does not permit unionisation, and Goldstar officials profess ignorance of any labour organisation. It is too early to judge how the labour councils will fare in these organisations.

A very serious labour dispute affected Control Data (Republic of Korea) - a wholly owned subsidiary of Control Data U.S.A. A serious industrial dispute in 1982 over wages and working conditions provoked the intervention of the National Security Police (NSP). Two versions of the dispute are circulating. The Korean version is that the operation was unprofitable and the trouble with the workers gave the parent company the opportunity to close the operation down. The other version purporting to come from Control Data and United States Embassy sources is that the management was prepared to meet the demands including reinstating the union leaders but was prevented by the NSP from rehiring the former union officials. As a protest against Government interference the whole operation was closed down.

Control Data has had a long history of attempts to establish a union. Even if the company version is correct in every detail one must presume that the operation was not outstandingly profitable, or Control Data would not have been willing to sacrifice their operation for a principle. It does, however, represent a further case of foreign companies' unease about Government intervention.

9. The future of the electronics industry

The Fifth Plan states "the major task of the electronics industry during the plan period will be to improve its international competitiveness through technological innovation and development of high quality new products. In particular, the development of industrial electronic machineries such as semi-conductors, computers and communications equipment will be stressed more than that of consumer electronics".[67]

Exports of electronics are to rise by 25.3 per cent per annum, compared with the projected 31.5 per cent of the Fourth plan. On this basis they would reach 13 per cent of total exports, compared with 9.4 per cent in 1981. The Fourth plan had anticipated a 1981 share of 13.7 per cent.

These estimates may be over-optimistic. Goldstar, in early 1982, entirely readjusted its projections to 1984 downwards. Employment was due to reach 1,567 by the end of 1982 in the semi-conductor plant, but this was cut back to 1,000. With investment schedules also cut back it will be difficult to reach the 1986 targets.

What is at issue is business confidence. During the 1970s companies trusted Government estimates, and willingly invested far in advance of demand. They now have ample surplus capacity in most fields and will not invest further until they expect that capacity to be fully utilised. The Government complains that there is an unreasonable lack of confidence and that is holding the Republic of Korea in a prolonged recession. From the business point of view it is entirely rational, but at the same time illustrates how much of the Korean process of development has rested on high business confidence reinforced by success.[68]

The assets of the Republic of Korea's electronics industry is that it now has some giants. Samsung Group is 109th in Fortune's list of the top 500 non-United States companies, and the Lucky Group, of which Goldstar is a part, 227th. They therefore have the assets to develop advanced technology. Samsung has just perfected the 64K chip, making ROK the third country in the world to achieve this. At this point a further major asset is the large number of Korean expatriates who are electronics experts. Most of KIET is staffed in this way. Since the Republic of Korea lacks the general level of electronics students a developed country possesses, this reserve remains important.

At the same time it remains clear that there are very substantial problems to be overcome. Probably only the very large Korean companies can tackle these problems. For one thing, such companies as Goldstar Semi-Conductors make a loss, but are justified in terms of the national interest. Presumably for similar reasons Samsung Semi-Conductor was merged with Samsung Electronics in early 1980 where the loss would be less obvious. Small companies not belonging to such groups could hardly afford this sort of state of affairs.

The question of trade barriers remain. Although the industry has made loud noises about quotas, the number of barriers is still very small. The United States limited the quota of colour televisions to 300,000 sets for 7 months, but in subsequent negotiations this was raised to 570,000 per annum and was abolished in 1982. As it had no patents for PAL or SECAM systems until late 1983 the industry could not sell in any of the markets such as Europe which use these systems.[69] Apart from the orderly market agreement for colour televisions the Republic of Korea has with the United States, the United Kingdom imposes a unilateral quota on black and white televisions and France a buyers quota on CB radios. France has also a quota on semi-conductors and Australia on other components and freezers.

Compared with textiles and the range of electronics produced in the Republic of Korea this is mild and could become a great deal worse. Since there is no sign of a reduction of protectionist tendencies one should forecast that further items produced by the Republic of Korea will be subject to restrictions in the near future and this too will cause problems for the industry.

The resilience of the domestic market in achieving sales of 1.2 million colour televisions in 1981 despite the recession suggests that the domestic market has the potential to play a continuing role in the 1980s which will help support the industry. Videorecorders and microcomputers will certainly follow colour televisions if offered for sale widely. The 1981 figure suggests about 14.2 per cent of Korean households bought colour televisions in one year. This reflects pent-up demand, but is nevertheless impressive.

From the point of view of employment, the prospects are less optimistic. Automation is likely to hold total employment at existing levels, or perhaps even reduce it. The worker will need to be more skilled than before either

through longer in-house training or through Government schemes. The latter seems more likely, but this will put heavier burdens on poor households' budgets as they support their children through more years of education, while for women workers, unless social customs change, the working life will be shorter.[70]

References

1. EPB: Guide to Investment in Korea, 1979, p.113, % of all foreign investment not just manufacturing.

2. Further export oriented labour-intensive industries could be deducted from the remaining aggregate. Ratios of exports to workers based on percentage share of exports/percentage share of manufacturing workers.

3. Textiles 32 minus 323 and 324, electronics 3832. 383 employed 10.99% of the manufacturing labour force.

4. Figures exclude non-manufacturing exports which were about 10% of total exports at both dates.

5. Yoshioka, Masayuki, "Overseas Investment by the Japanese Textile Industry", The Developing Economies, 1979, pp.20-21.

6. In fact the share appears to have risen and then fallen between these two dates.

7. One reason why the expansion of the cotton industry was encouraged in the 1950s was to absorb increasing amounts of PL.480 cotton.

8. Far Eastern Economic Review, 1962.

9. ERCK: Industrial Structure of Korea, Seoul, 1962, p.113.

10. Far Eastern Economic Review, 37, 1962, p.292.

11. ERCK, Ibid, p.112.

12. Drawing conclusion from aggregate figures poses some problems in that underutilisation of plant in firms just beginning production, or not producing for the whole year may account for part of this problem. Kim Yung-bong: Growth and Structure of Korea's Textile Industry, p.247.

13. As opposed to efficiency through competition with world producers.

14. Because the source of figures for joint ventures is in Japanese, many of the 1973 ventures would not be in production in time for the 1973 census. Note there is a discrepancy between Japanese figures showing a total of 89 joint ventures and Korean figures of 79.

15. See Chapter III, section 7.

16. For this criticism of the 1960 census see ERCK, Industrial Structure of Korea, 1962, p.107. I have so far been unable to discover how this problem is treated in recent censuses.

17. KOFOTI, Yearbook, 1981.

18. It may be that the drop in domestic consumption in the early 1970s was artificially large due to an export boom and the sluggish domestic economy.

19. This is on total revenues to total expenses. In view of the pressure of cash flows this seems the best measures of Korean Industries profit.

20. As discussed above, liquidation in a Korean context normally does not mean that a plant is scrapped, merely a writing off of debts and a new owner, who may or may not assume responsibility for part of existing debts (in this case the new owner is normally taken in as a new senior partner).

21. Textile machinery is one of the areas to be reserved for small and medium industry in the 10 Year Small and Medium Industry Plan. Whether this is a disbenefit to the much more important textile industry depends on having very high quality management and technical skill in the small and medium plants. The textile machinery manufacturers are likely to be granted control over imports of textile machinery.

22. Jones and SaKong: Government, Business and Entrepreneurship in Economic Development, Appendix A, pp. 324-327. The whole appendix has a series of useful insights into Korean entrepreneurship.

23. Kaname Akamatsu: "A Historical Pattern of Economic Growth in Developing Countries", The Developing Economies, 1963. The 'Flying Geese' terminology refers to the shape of the curves of imports, output and exports.

24. What has so far proved impossible to identify is the point at which the subsidy takes place.

25. KCCI: Korean Business Directory 1981.

26. KOFOTI, Textile Year Book 1981, Table 99. The total is acetate 1, rayon 1, acrylic 2, nylon 6, polyester 13, other 1.

27. These figures for the operating rate are considered with some suspicion in EPB. Whether there are cost penalties underlying operating ratios above 100 as microeconomic theory would suggest, remains unclear.

28. Included in this is the fact that the man-made sector paid a 15% divided in both 1977 and 1978 compared with no spinning dividend at all in wool spinning and 8% and 12% in respective years in the cotton spinning. The dividend in the weaving sector was 5-6% in cottons and 8% in 1977 and 10% in 1978 in both wool and man-made fabrics.

29. Though as figures quoted above suggest, textiles produced in Korea are an important component in the value of garment exports.

30. Since additional mark up on exports go to wholesalers and retailers outside Korea.

31. But more Korean companies advertised Japanese branch offices in the 1949 Korea Traders Association, Korea Trade Directory, than the 1963 directory.

32. There are various conflicting claims as to which firm set up the first United States buying office. Several were established in the early 1960s and many of the more famous such as Penny and Macy date from 1969. The establishment of a buying office was normally the end of a period of dealing with Korean manufacturers without establishing a permanent office.

33. K.T.A.: Korean Trade Directory, 1963.

34. No precise breakdown is available.

35. This has led Government advisers to believe that the small and medium industries have an increasing role to play in garments in the future. The desire for a long run presumably discouraged firms from producing for the domestic market which demanded shorter runs than mail order houses.

36. R. Dore: Adjustment in the Textile and Clothing Industries in Japan, ILO draft.

37. In the Korean case, the heavy pressure by one company to prevent its importer from buying from any other country.

38. Figures for union membership vary. The Textile Workers Union report gives a lower figure than the Office of Labour for 1978. The figures given above are the Office of Labour's figures.

39. "Flames in Seoul Peace Market Damage the Myth of the Passive Asian Woman Factory Worker", Newsletter of International Labour Studies, July, 1980, pp.2-6.

40. Despite the fact that the Labour Standards Law lays down provisions for a lower number of hours worked by women.

41. KFTU, Occupational Diseases amongst Women, Seoul, 1980.

42. Economic Research Center of Korea: Industrial Structure of Korea, 1962, pp. 335-341.

43. Far Eastern Economic Review, 1962, pp.452-4.

44. Ibid, p.453

45. The first Japanese company was a solely owned subsidiary of Toshiba in 1969 followed by a Sony joint venture.

46. In 1969 bonded processing had handled 89.7% of exports, and in 1968 85.7%.

47. These figures are based on MCI (Fine Instruments Center): Investment Opportunities in Korea for Electronics Industry, 1975. These were 10, sole ventures, 26 Japanese, (21 at Masan Free Export Zone) and 3 others.

48. Despite the beginning of sales of colour televisions on the domestic market.

49. Data from EPB, Manufacturing and Mining Census for 1980. In a more advanced economy this ceases to be true. A large number of very small specialist firms emerge buying components commercially and manufacturing items they have developed. The Republic of Korea does not yet have this sort of level of manpower skills from which such firms would emerge, although they are to be encouraged under the 10 Year Plan for Small and Medium Industry.

50. A major problem about foreign investment figures is the tendency to produce totals uncorrected for inflation. Cumulative total as of end 1978.

51. Sam Yang, the second investor of the 1960s is the major food producer, but has never greatly expanded its electronics production, merely changing from radios to stereo speakers.

52. There are discrepancies in these figures, IDE: Comparative Advantage of Electronics and Woodprocessing Industries in Korea, Tokyo, 1981, p.35 give a higher figure (though based on EP8 figures) than EPS: Guide to Investment in Korea, 1979, 156.6 million as opposed to 131 million.

53. Whether this is also true at managerial levels at head office is unclear. B.I. Cohen: Multinational Firma and Asian Exports, 1975 found a low movement between firms. This was because the industry was still at an early stage of development, and Cohen was asking shop floor workers, not higher grade staff.

54. EPB: Investment Opportunities in Korea, EPB, 1979, p. WHAT PAGE NO.????

55. Western Electric has a 44 per cent share.

56. As opposed to the technical production level. The technicians trained in foreign firms do not necessarily have an economic back-ground which would suggest economically more efficient forms of production as opposed to technically more efficient or sophisticated.

57. Although these measures have become common place in the literature, they received virtually no mention in the contemporary publications as the Korea Annual and EPB Economic Survey where much more emphasis is given to promotion measures for other industries which did not in the end become successful.

58. This summary is based on the account in KDB: Industry in Korea, 1976. The actual plan contains slightly less detail and talks of 57 items, not 56.

59. This symptom is also apparent within other associations where groups with several subsidaries in the same field are protesting at paying the substantial contributions demanded of members on the grounds that one member per group is enough.

60. EIAK: Electronic Industry in Korea 1981, heading VII. Curiously according to EPB Investment Opportunities in Korea, 1979 the minimum investment figure in electronics was already at US$ 100,000, the new minimum limit under the 1980 measures. In other words for this particular industry there was less change than for other industries.

61. In 1978 Bela Balassa and myself were in conversation with Korean ministry officials, both of us arguing that the social reasons were justified. I now think I was mistaken. The loophole of handcarrying sets by airline passengers was sufficiently wide to already create social tensions. It would have taken some of the heat out of the economy in 1978 had the sale been legalised then.

62. There was apparently no limit on the number of times an individual could bring in a set. Sales were also authorised to United States personnel which inevitably found their way to Koreans via the well developed black market.

63 EIAK: Electronic Industry in Korea 1981, p. 4. This source does not specify the number of months, nor whether the .54 million sets was for only part of the year compared with 1.6 million for a full year. In any case it could be argued that ownership of black and white sets was now so high that purchases would fall to replacement and new household levels.

64. After January 1980 the six companies were reduced to two in a rationalisation scheme. Note this figure of 42% is only of manufacturing employees and does not include service sector employees.

65. Goldstar figures are taken from KCCI: Korean Business Directory, 1981 and therefore slightly overestimate industrial workers. Samsung figures are taken from 1980 annual report.

66. Although on the shop floor the workers appear to be doing identical jobs.

67. A Summary Draft of the Fifth Five-Year Economic and Social Development Plan, Sept. 1981, p.68.

68. See Chapter 3, Entrepreneurs.

69. In 1980, just over 50% of colour TVs went to USA and Canada, and about 40% to South America. Samsung has just built a factory in Portugal to penetrate the European market, and Goldstar a factory in the USA to circumvent quota restrictions.

70. Assuming that firms still require production line workers to quit when they marry and that the average age of marriage cannot rise much further.

CHAPTER V

LESSONS AND PROSPECTS

1. Introduction

Throughout the preceding four chapters adjectives with the approximate force of "remarkable" have been consistently used to describe aspects of South Korean's experience. Because the Republic of Korea exists, and has been so successful it is important to remind oneself how "remarkable" this process has been. It has become trendy to use the ghastly phrase the Asian "gang of four" without remembering how different these four countries are. In practice these four countries have little in common except their success and the association with labour-intensive exports.

Two are city states, and while Lim and Fong remind us that a city state is not predestined to become successful if the wrong policies are pursued (as in the case of Aden), nevertheless the sorts of problems city states face are quite different from those faced by larger countries.[1] The Republic of Korea is the largest of the countries in this group with correspondingly much greater problems. On a larger scale successful export promotion has not been on a large enough scale to transform the whole of Brazil or Mexico which are three to four times the size of the Republic of Korea.

While facing disadvantages compared with Asian NICs, the Republic of Korea could therefore be held to have considerable advantages over American NICs. The small area of the country permits more inensive infrastructure investment and the more rapid unification of the domestic market. The question of scale and size of the economy has rarely been posed. The quest of Hollis Chenery and others for some "norm" has largely disregarded this question. Yet it is of vital concern especially where the role of export led growth is concerned. If the Republic of Korea required a 1 per cent share of world trade to get where it is, a country like Brazil would require at least 3.5 per cent. In practice both have about the same share, but by any

standards the rate of growth in the Republic of Korea is impressive. Most other countries started from a higher level of per capital income than the Republic of Korea, which in 1960 had a per capita income no higher than India or other poor LDCs.

As has been stressed the initial stages of growth were largely derived from internal sources. Although export growth was the most rapid element, until 1971 it was furnishing less than 30 per cent of annual GNP increase. The psychological element in the rapid expansion of exports may well have been greater to foreign investors and lenders, to Government and to private enterprise. But this cannot hide the fact that manufactured exports were not the prime motive force. In the 1970s, however, they became so.

The pace of change within each industry was equally dramatic as the sectoral studies show, going from a primitive level of manufacturing towards something approaching the level of advanced countries by the beginning of the 1980s.

Because it has happened, the Republic of Korea seems less remarkable. But it need to be remembered that in the early 1960s the Kennedy Administration stated that it was not committed to Korea's First Five Year Plan which was "too ambitious" and "trying to do too many things in a too short time". In the mid 1960s IBRD consultants were told to reduce their GNP growth rate estimates because "countries do not grow at 8-9 per cent per annum".[2] By the 1970s the Republic of Korea was expected to achieve whatever targets it declared and the remarkable became commonplace.

To recover something of this sense it would be necessary to conceive of Bangladesh reaching the Republic of Korea's current per capita income within 20 years.

2. Which lessons?

Are there lessons to be learned from Korean experience? Or was the Republic of Korea so unique, or the historical circumstances of the world economy between 1960 and 1973 so unusual, that nothing can be learned from the Republic of Korea?

In approaching the question it is important to differentiate between the concept of a Korean "package", a distinctly Korean model which would be

applied wholesale, slightly modified no doubt, to another developing country, and an à la carte menu which developing countries might ponder and select or reject at will. The latter is obviously attractive. There are many "tricks of the trade" which other countries' planners might pick up from the Korean experience at various stages of development, and all of them worth considering. But picking up a few tricks will not transform a country's whole economy and the Republic of Korea's achievement lies in its total development, not merely the growth of exports.

There are two aspects of the country's development which deserve close attention. Firstly the transformation from low growth to high growth which is of as much interest to many developed countries as to the developing world, and secondly sustained high growth.

The language and conceptual framework used to describe its achievements is important. A considerable number of local and foreign writers have described the country's policy in neoclassical language, either criticising contrary policies or denying their role. This has resulted in a stream of contrary advice and direction from outside agencies based on such precepts. Descriptions which take Keynes' view "that the postulates of the classical theory are applicable to a special case only and not to a general case "are much rarer".[3] This is not to say that Korean officials and planners have been steeped in Keynesian theory. Far from it their theory has been ill defined and based on precepts or prejudices transmitted from the Silhak school of Confucian economists of the eighteenth century in which the national interest is the clear priority, in which farming is highly revered, which advocates interventionist, reformist and redistributive policies.[4]

Constant pressure from outside has frequently been a valuable corrective to force the Government to leave well enough alone. The close interaction with the business community through quasi-agencies and informal relationships has also kept officials in touch with the rest of the world. The interaction of these three pressures have produced a policy which broadly suited the country's circumstances.

2.1 The transformation from low growth to high growth

Koreans were not prepared to sit still and wait until the export sector had geared itself up along the lines of comparative advantage and begun to

have an impact on the rest of the conomy. Indeed in 1961 no one had thought of export-led growth, all people were trying to do was to promote exports as part of a collection of measures including import substitution to solve the enormous trade deficit. Enacting a set of neoclassical measures which would (time period unspecified) produce optimal results was not part of the the Republic of Korea's package. Many accounts start with the exchange rate, interest rate and tariff reforms of the mid-1960s, where as growth began in 1961 masked by the disastrous harvest failure of 1962.

This growth was achieved by getting the prices right in the agricultural sector and pumping credit into rural society. Abandoning the "cheap food for urban dwellers" policy pursued in so many developing countries has obviously had an effect on industrial wages. Manufacturing wages could have been lower if free food imports had been encouraged, but this was never considered a serious option after 1961.

The Kennedy administration was correct; the aims of the first plan were "too ambitious", but only an ambitious plan could harness the energy of the people at multiple levels. Harvey Leiberstein has given the concept of harnessing energy a respectable (or at least trendy) phrase in terms of X-efficiency, which measures effort. In any cross country comparison, the Koreans must measure very high in X-efficiency. Nor is this effort confined to the ROK, the Taein factory system of DPRK in the late 50s and early 60s was based precisely on the concept that effort by workers can overcome limitations of installed capacity, or any other physicl problem.

The force that mobilised the ROK was not merely a highly competitive nationalism, but a self-reinforcing system. There was no sector of society that was cushioned and could grow fat without effort. To a large degree inflation ensured that. Moreover the Republic of Korea was probably fortunate in starting from a position in which the stagnation was obvious to all. The Military Revolution, was a revolution and not a coup, in that large numbers of the elite who had prospered under the old regime (at least) temporarily lost their positions and wealth.

Talk of concensus does not mean that in the early sixties there were not substantial groups in society who adopted a wait and see attitude, but that the setting of clear and very ambitious targets and a mobilisation of funds and energies were the major ingredients.

2.2 Sustaining high growth rates

Growth through sheer enthusiasm is not sustainable. Bottlenecks appear, existing overcpacity is exhausted. What had been demonstrated was that high growth was possible, business confidence was restored, and in the first plan the grossest bottlenecks were foreseen and prepared for.

The Second Plan and associated reforms brought a very different approach, close to neoclassical precepts. However many of the benefits of the Second Plan were not apparent until the Third Plan period, while the disbenefits became apparent almost immediately in the massive flight from the countryside in the later 1960s and the rapid growth of shanty towns around the major cities. The Korean achievement was to stem this growth into the cities through putting more money into the countryside under the third and fourth plans and urban redevelopment which meant that Seoul went through its shanty town phase in ten to fifteen years.

Doubtless the funds deployed in these ways would have had a higher rate of return in manufacturing, but their benefits would have been less evenly according to the best rate of return in the second half of the sixties, an adequate industrial base was created which could become much more self-sustaining in the 1970s, when Government attention was diverted back to a broader view of development.

The Heavy and Chemical Plan of 1973 has to been seen as born in the crisis of the late 1960s and early 1970s. Migrants were flooding into the cities and light industry was not growing fast enough. A broader range of industries was felt to be necessary. Possibly the signals the Government responded to were short-term rather than long-term, but by the end of the 1970s the Republic of Korea required the industries that had been created ahead of demand.

In both the 1960s and 1970s the control of credit must be seen as vital. Of all the lessons the Republic of Korea offers, although it is an unfashionable one in the period when monetarism rules, the way in which the Government can control credit to produce industrial investment is the chief lesson. Inflation undoubtedly resulted, but this only enhanced the rate of capital accumulation since it encouraged investment which could be paid off more easily once the policy of real interest rates was abonded in the late

1960s. Inflation has a bad name in the early 1980s, but there is a respectable theoretical case which can be made for inflation having assisted the Republic of Korea's development.[5]

Readers familiar with Japanese development between 1953 and 1969 will see very strong parallels between the financing of Korean development between 1961-1979 and Japanese development, including the close direction by MITI in Japan and to a lesser degree MCI in the Republic of Korea. In one sense what the Republic of Korea demonstrates is that Japan is not unique. The Republic of Korea showed that a much smaller and poorer country could adopt the same strategy and perform as well, if not better than Japan. Countries wishing to learn lessons from Korean development will also (however unpopular this may be in Korea) need to cross-refer to the corresponding strategy at the similar phase in Japan.

The people of the Republic of Korea will be quick to point out the strong differences between the themselves and Japanese, both in character and in history. They are right to do so, and this in turn offers hope for other countries trying to adopt the Korean strategy. The interesting question is whether the control and creation of credit could not be combined with the Singapore method of funding both investment and social security through CPF, the workers retirement scheme, to which both employees and employers contribute, which kept inflation at a lower rate than either Japan in the 1950s or the Republic of Korea in the 1960s.[6]

2.3 Lessons for would-be NICs

Table 5.1 compares manufactured exports of the Asian NICs, Mexico and Brazil. It can be seen in 1963 the Republic of Korea exported the lowest total of manufactured goods and in 1977, the highest. Likewise, despite the Republic of Korea's poor resources, when total exports are compared the Republic of Korea's exports narrowly exceed those of the other countries. Curiously for all their diversities, all but Mexico have total exports of roughly the same order. Is this more than a coincidence? In a recent article William Cline argued that even if a large group of LDCs could achieve a high level of export orientation, the impact on Western Markets would be more than the latter could absorb, and increased protection would be the likely result.[7]

Table 5.1 Exports of Asian and American NICs

	Exports					Per capita
	Manufactured goods			Total		Income
	1962	1977	1978	1978	1979	1979
Korea	10	8,480	11,220	12,711	15,055	1,480
Mexico	122	1,182	1,620	5,739	8,768	1,973
Brazil	39	3,141	4,335	12,527	15,244	1,780
Hong Kong	642	7,267	10,693	11,499	15,156	3,760
Singapore	328	3,626	4,679	10,134	14,233	3,830
Spain	227	7,214	9,620	13,115	17,903	4,380

Source: World Development Report, 1980 and 1981.

In practice such a development would be unlikely. It is probable that at any one time, only a cohort of LDCs would achieve high levels of exports in labour-intensive manufactures. By this time the existing NICs would have moved up a "Bela Belassa style ladder" of development above the lower rungs. This can be seen in the Republic of Korea where the lowest grades of textiles and garments have lost their export markets.

What development economists have only just begun to consider is that fact that the bottom rungs of the ladder may no longer exist by the end of the next decade due to automation. The Republic of Korea and other NICs may be high enough up the ladder. The problems automation poses are considered below. But what hope do other, poorer, countries have? It is at this point that the degree to which the Republic of Korea developed without excessive reliance on exports, i.e. the first decade, that requires reevaluation. Secondly and closely related it is important to look closely at the way the benefits of the modern sector "trickled out", as opposed to "trickled down". That is, how did general modernisation proceed? Despite the fact that export manufacturing was at first confined to narrow areas of the economy, modernisation and industrialisation proceeded in all sectors.

Here the role of the Government in planning for all sectors and carefully allocating scarce resources becomes important. An across the board adoption of the "best" neo-classical policies might have developed an export sector based on comparative advantage, but would not have ensured parallel development in other sectors. In practice leadership in the sense of general mobilisation and setting an example was extremely important. This worked in many fields and numerous examples can be found of companies setting themselves five year plans in imitation of the Government.

There is an important lesson which is likely to be missed if Korean or Japanese development is described in neoclassical terms. Government intervention and assistance has been pervasive, but rules and regulations have been extremely flexible. The British system has encouraged a gargantuan bureaucracy which enforces rules inflexibly, whereas the much smaller number of officials in the Republic of Korea are given much greater leaway to interpret regulations according to individual circumstances.

Industrialists have had a much higher nationalist priority than in the United Kingdom and have accordingly been rewarded by the Government. British observers have looked labour relations without setting it in the context of Korea or Japan, where in the past many workers never doubted the Government stands for the whole nation's interest, and that Government might discipline profit-seeking industry as much as fractious labour. The workers accepted sacrifices in the national interest; all they asked was that the rich made the same sacrifices.

The degree to which EPB and MCI have created a government machine which puts growth first, and evolves a clear set of targets and means to reach the targets worked out with industry is perhaps the most striking contrast with the United Kingdom.

3. The future of the Republic of Korea

The Republic of Korea has grown fast, and an average growth rate of 9 per cent allows a lot of margin for government and business errors, which 2.3 per cent does not. It still has a per capita GNP half that of Singapore and Hong Kong, and a quarter that of the United Kingdom There is every reason to suppose that growth rates will be slower in the 1980s. The last two years

have been around 6 per cent, and the Fifth Plan predicts 7-8 per cent compared with the 10 per cent confidently predicted in 1978 by KDI for the 1980s.

The Republic of Korea may do well to averge 6 per cent during the first half of the decade with world overcapacity, a strong dollar and continuing recession. Even were world recovery to take place at the end of 1983 with a fall in oil prices, the country faces a number of structural problems. The obvious one is that wages in industry are low compared with the service sector, but that there is an enormous reserve of self-employed farmers and shop-keepers who in the Federal Republic of Germany moved into more productive occupations in the 1950s and early 1960s. The Republic of Korea, however, is likely to need to automate many industrial processes in the 1980s in order to keep up with its competitors in advanced countries so that full employment may be much more difficult to achieve.

The implications of these changes fall into three categores:

a) Implications for export prospects, especiall in growth industries;
b) Implications for the employment structure of the Republic of Korea and social policies;
c) Implications for the balance between exports and the domestic market.

The "chip" technology has the potential to destroy pre-existing certainties about the Republic of Korea's comparative advantage. It should anticipate a rapid rise in the efficiency of many sections of western industry in the post-recession world. In the motor and engineering industries, where advance is expected, much more limited markets may be available. Indeed even in areas where the Republic of Korea has established supremacy such as textiles and garments, competition may come not from lower income countries, but from high income countries.[8]

There are special dangers in the country's system which could lead to wasted investment because new plant becomes obsolescent before it has paid for itself. There may be special problems for small and medium firms; the selected group according to government plans for certain industries which tend to be less well informed than large firms and which rely on the traditional high costs of retooling for short production runs. Computer aided designs on one hand and the type of one-man operated automated plan now evolving in Japan on the other may eliminate much well paid employment which traditionally required highly skilled labour.

The basic problem is that the new technology can make a labour productivity gain (including elimination of faulty products) of five or more, which is sufficient to eliminate any advantage of low wages. As explained above, in the case of a number of modern Korean enterprises, it is not so much low wages but high labour productivity compared with less efficient western competitors which has given the country its leading edge. It had newer, better designed and cheaper plant than its rivals. But part of the labour productivity was in terms of a working week which might add 25 per cent more labour. There must come a time when Korean workers demand higher rewards as a sense of international comparison grows. One might suppose that they, like the Japanese will prefer more money to increased leisure. But either option would decrease the competitiveness of Korean industry.

Not only recession and protection but also unpredictable leaps in the efficiency of Korea's competitors may pose special problems for companies and Government alike. Certain Korean companies are now powerful enough to be in the forefront of this technology. There is no reason why Samsung, Daewoo, Hyundai, the Lucky Group and Kukje should not import scientists, or finance their own research and development. In introducing automation as they must, to keep their markets, because internationally the country is a price taker rather than a price giver, there will be a profound impact on employment.

The Republic of Korea will be forced to import structural unemployment in order to retain her competitiveness and this means that new recruitment in labour intensive industries may be low. Small and medium companies may find themselves forced out of domestic markets as the more flexible automated production processes make short runs cheaper.

As early as 1976 a World Bank model predicted that if GNP growth fell below 8 per cent, given the age structure of the country's population, serious unemployment would result. This was based on existing relationships between GNP growth and employment. Since then growth has fallen and is not expected to rise as high as 8 per cent during the Fifth Plan period. At the same time labour demand in manufacturing per increment of GNP growth will fall. Consequently it would appear to me unlikely that the manufacturing labour force will rise as high as predicted in the Fifth Plan, which is by a factor of nearly 25 per cent. It certainly has the potential to stay where it is, producing a job deficit of about 1 million by 1986.

Employment in manufacturing has been falling since 1979 and in 1981 was 8 per cent below 1979 levels, although the manufacturing production index was 8 per cent higher. The number of people working in agriculture has risen slightly and those in services jumped considerably. This has however only served to increase the inefficiency of the two most inefficient sectors of the economy, agriculture and services. The Fifth Plan projections for agricultural employment are very high, with a minimal drop, suggesting that the gap between rural and urban living standards will widen. Structural unemployment will only serve to widen this gap.

The services in Korea are already ripe for a massive reorganisation. If anything the microelectronics industry already has the potential to trim the labour force in the service sector increasing unemployment further.

In the West workers are generally prepared for increased leisure. In Korea and other Far-Eastern countries the leisure ethic is hardly developed. Consequently one might expect underemployment in marginally productive activities. Such a trend would actually increase the dangers of the remergence of a dual economy. Under such conditions can the family be expected to shoulder the burden of unemployed members when all members may be unemployed? Korea could face considerable unrest under such circumstances if an unemployment scheme is not instituted. The Fifth Five Year Plan appears to contain no scheme for unemployment pay, although the projected number of unemployed under existing projections is high in human terms, appraoching 700,000 workers and their dependents.

I would argue that Korea cannot avoid structural unemployment being imported. The question is, firstly what measures are to be adopted to prepare for it, and secondly what measures will need to be adopted when it becomes apparent? There are clearly a range of policy variables which deserve consideration. However the strongest case must be made for studying the measures adopted by advanced countries and their relative success or failure.

Secondly there is a need to consider the balance of policy towards export and domestic growth. There can be little doubt that it in the future exports must become more efficient which inevitably means a reduced labour force, then the domestic economy becomes the major source of employment. This requires a radical reassessment of the nature of government incentives which since

September 1980 have tended to push exports as the major driving force in the economy. Ironically the major source of employment may well be a growth in the leisure industry.

Finally, as argued above, the nature of the microchip revolution is to shift the balance between capital and wages in national income. As a recent article by Cherns states "society has traditionally relied on employment to allocate its resources among the various claimants; but how will this be possible when goods and services can be produced with less and less labour time".[9]

It has been noted that the policies adopted since 1980, if followed up, mark a radical departure from those of the past. It seems determined to let market signals play a dominant role. Unfortunately the market signals indicate to businessmen that it would be wise to slow down investment. At other times of depression the Government has taken a strong lead and made concessionary credit available. In 1980-81 interest rates remained high, and the Government remained more concerned with inflation than growth. Not unnaturally businessmen too became more concerned with stability than growth.

Every businessman has reconsidered his payroll and shed fat. He has been forced to consider efficiency and productivity as never before which previously rapid growth, low interest rates and high inflation rates concealed underlying problems if the growth were ever to stop. Most major enterprises seem to think the experience may have been useful, but from an employment point of view it has been negative. Wages have failed to keep pace with inflation and labour unrest appears to be growing despite a fall in union numbers.

Enterprises thrived in a rapid growth situation. There were advantages as well as disadvantages to inflation.[10] It was the rising middle class rather than business which urged inflation be seen as the major problem. The decline in living standards has had an immediate impact on most enterprises. For the first time in nearly two decades per capita consumption of textiles actually fell in 1980. Domestic demand for electronics dropped sharply. Companies began to realise the extent to which they relied on the domestic market.

So far the Government has refused to take cognisance of the problems a domestic recession created for industry. It has re-emphasised the importance of exports. In the world context of the 1980s this may well be a mistake, and a clearer recognition that the ROK economy stands on two equal pillars the domestic and the overseas market seems essential.

References

1. Lim L. and Fong Pang Eng: Trade, Employment and Industrialisation in Singapore, 1983.

2. Far Eastern Economic Review, 1962, 36, June 28, interview with consultants in first transportation study for IBRD made in 1965.

3. J.M. Keynes: The General Theory of Employment, Interest and Money, 1161, p. 3.

4. For further details see Chapter 3 of T. Michell, Korea Under the Fourth Five Year Plan (forthcoming).

5. For instance A.P. Thirwall: Inflation, Saving and Growth in Developing Economies, 1974. Curiously, Thirwall ignores Korea.

6. While working for EPB in 1979, I argued that the introduction of the suspended social security law would have had the required deflationary effect on the economy without producing such a dramatic lower of the growth rate.

7. William R. Cline: "Can the East Asian Model of Development be Generalised?, World Development, 10, No. 2, pp. 81-90, 1982.

8. The automation of garments has posed special technical problems for robotics, for instance the thinness of cloth making if difficult for robots to handle. The technical problems in this area have recently been solved, for instance in a joint University of Hull/Marks and Spencers design project.

9. A.B. Cherns: "Speculations on the Social Effectrs of New Microelectronics Technology" ILO Review, 119, 1980, No. 6, pp. 705-722.

10. For national advantages see the restatement by R. Vos in the somewhat misleadingly titled "External Dependence, Capital Accumulation, and the Role of the State: South Korea 1960-77", Development and Change, 13, 1982, pp. 91-121.

Appendix

Table 1

Exchange Rates of Won to U.S. Dollar

Year	Official Rate	Year	BOK buying rate from foreign exchange banks	Year	Basic Exchange rate by the Bank of Korea
1950 1.1	0.9	1964 5.3	255.51	1967 12.31	274.60
5.1	1.8	9.30	255.51	1968 12.31	281.50
5.15	1.6	12.31	255.51	1969 12.31	304.45
6.15	1.8	1965 3.31	262.93	1970 12.31	316.65
11.1	2.5	6.30	271.10	1971 12.31	373.30
1951 5.1	2.5	9.30	271.10	1972 12.30	398.90
11.10	6.0	12.31	271.50	1973 12.31	397.50
1953 8.28	6.0	1966 3.31	271.40	1974 2.71	484.00
12.15	18.0	6.30	270.90	1975 12.31	484.00
1955 1.10	18.0	9.30	270.90	1976 12.31	484.00
8.15	50.0	12.31	270.90	1977 12.31	484.00
1960 1.20	50.0	1967 3.31	269.22	1978 12.31	484.00
2.23	65.0	6.30	269.17	1979 12.31	484.00
1961 1.1	100.0	9.30	268.39	1980 12.	580.00
2.2	130.0	11.24	268.11	1981 12	659.90

Note: With the adoption of a unitary fluctuating rate system and a floor rate of 255 won per U.S. dollar on May 3, 1964, the selling rate to customers and buying rate from customers by foreign exchange banks are determined and posted daily by the Bank of Korea. Taking the free market rate into account.

Source: The Bank of Korea.

Appendix

Table 2
Export Promotion Measures

Types of Incentives	*Duration*
Tax Incentives	
Commodity tax exemption	April 1950–
Business tax exemption	January 1962–
Reduction of corporation and income tax by 50% on earnings from exports	January 1961-December 1972
Accelerated depreciation on allowance for fixed capital directly used for export production in mining, fishing and manufacturing	January 1961–
Tax credit for foreign market development expenditures	August 1969–
Tax credit for losses due to operations in foreign markets	March 1973–
Tariff Incentives	
Tariff exemptions on capital equipment for export production	March 1964-December 1973
Tariff payments on an installment basis for capital equipment used in export production	January 1974–
Tariff exemptions on raw material imports for export production	April 1961-June 1975
Tariff drawback on imported raw material used for export production	July 1975–
Wastage allowance	July 1965–
Financial Incentives	
Financing for export sales	February 1948-July 1955
Export shipment financing	June 1950-July 1955
Export promotion fund financed by counterpart fund	November 1959-January 1964
Financing imports of materials to be used in export production	October 1961-February 1972
Export credits (trade credit before 1961)	June 1950–
Financing suppliers of U.S. offshore military procurement	September 1962–
Fund to promote the export industry	July 1964-September 1969
Fund to convert small and medium size firms into export industries	February 1964–
Fund to prepare exports of agricultural and fishery products	September 1969–
Foreign currency loans	May 1967–
Financing exports on credit	October 1969–
Other Promotion Schemes	
Foreign exchange deposit system	June 1949-January 1961
Trading license based on export performance	January 1953–
An export bonus with preferential foreign exchange	? 1951-May 1961
Payment of export subsidy	? 1954- ? 1955 and ? 1960- ? 1965
Discount on railroad freight rates	? 1958–
Monopoly rights on exports of specific items to specific areas	April 1960–
Creation of exporters associations on various export products	September 1961–
Financing KOTRA	? 1962–
Export-import link system	November 1962–
Discount on electricity rates	? 1965- ? 1976
Waiver issuance for shipping	? 1965- ?
Local L/C system	March 1965–
Differential treatment of traders based on export performance	February 1967–
Export insurance	January 1969–
General trading company	May 1975–
Export-import bank	June 1976–

Source: From Jones and SaKong: Government, Business and Entrepreneurship, pp. 94-95, based on Wontack Hong: Trade, Distortions and Employment Growth in Korea, pp. 54-55.

Table 3

Growth Rate by Sector

(At 1975 constant market prices in percentage)

	GNP	Agri. Forest. & Fish.	Min. & Manuf.	Mining & Quarry-ing	Manu-factu-ring	Soc.over-head cap. & other Services	Cons-truc-tion	Elec-tricity Gas & Water	Trans-Storage & Comm.	Whole-sale & Retail	Fin. Insurance Real Est. Bus.Serv.	Owner-ship of dwell-ing	Public Admin. & Defense	Commun ity Soc & Pers. Service
1962	2.2	-6.0	13.4	21.8	11.7	8.6	15.3	21.9	13.2	10.1	11.5	2.3	3.7	10.3
1963	9.1	9.5	14.2	5.3	16.1	7.5	18.3	10.8	17.8	7.3	2.4	2.1	3.8	10.5
1964	9.6	15.6	10.5	13.4	9.9	3.5	7.6	18.9	16.2	-1.7	16.4	2.9	2.0	5.5
1965	5.8	-1.0	18.3	7.7	20.5	9.7	24.6	22.0	20.0	11.5	13.3	2.3	3.0	6.9
1966	12.7	11.6	15.3	4.8	17.3	13.0	20.9	19.1	24.6	15.0	10.9	3.1	6.6	8.1
1967	6.6	-5.9	20.2	11.4	21.7	14.6	19.3	28.0	22.2	16.9	16.3	2.3	6.1	9.9
1968	11.3	1.3	23.4	-1.5	27.2	15.3	38.5	24.6	30.8	16.6	16.7	3.9	4.9	10.1
1969	13.8	10.5	19.2	-1.4	21.6	14.2	37.6	29.8	26.2	13.4	12.7	4.2	4.6	8.7
1970	7.6	-1.4	19.6	16.6	19.9	9.5	5.0	19.2	19.0	16.2	17.6	4.5	5.1	8.6
1971	9.4	3.7	17.3	1.1	18.8	9.8	-2.2	19.0	14.5	17.6	13.5	4.1	3.6	9.9
1972	5.8	2.0	12.9	-1.2	14.0	5.0	-1.1	12.1	9.8	9.3	2.0	4.0	-1.0	4.7
1973	14.9	6.3	28.6	18.9	29.2	13.6	28.2	22.0	26.5	16.7	10.0	4.1	0.7	6.1
1974	8.0	6.7	15.2	6.1	15.8	5.1	2.6	13.4	7.3	5.9	12.5	4.5	1.8	3.8
1975	7.1	5.3	12.6	12.3	12.6	5.1	13.9	19.1	11.6	6.6	7.0	3.4	1.6	3.1
1976	15.1	10.7	21.5	2.4	22.6	13.7	12.3	18.4	17.4	12.3	14.6	5.7	2.5	5.2
1977	10.3	2.1	14.3	11.8	14.4	11.9	25.2	15.5	18.1	8.2	20.4	4.4	2.6	5.5
1978	11.6	-4.0	20.0	4.3	20.7	13.5	25.3	18.9	18.4	11.0	14.8	6.3	2.7	6.3
1979	6.4	6.7	9.4	-2.0	9.8	4.1	1.7	14.7	13.9	3.9	2.5	5.7	2.5	6.9
1980	-6.2	-22.0	-1.1	-1.0	-1.1	-3.4	-0.8	6.0	3.4	-1.8	17.1	4.2	3.8	3.5
1981	6.4	22.0	7.2	8.7	7.1	0.6	-5.9	8.5	8.9	6.4	-16.3	3.6	1.9	3.5
1982	5.4	4.5	3.7	-2.6	3.9	7.0	20.7	6.7	5.9	3.7	8.6	4.6	2.2	5.9
Average														
62-66	7.8	5.6	14.3	10.4	15.0	8.4	17.2	18.5	18.3	8.3	10.8	2.5	3.8	8.2
67-71	9.7	1.5	20.0	5.0	21.8	12.6	18.5	24.1	22.4	16.1	15.3	3.8	4.9	9.5
72-76	10.1	6.2	18.0	7.5	18.7	8.4	10.7	16.9	14.3	10.1	9.1	4.3	1.1	4.6
77-80	5.4	-5.0	10.3	3.4	10.6	6.7	13.0	13.7	13.8	5.3	12.2	5.1	2.8	5.7
62-80	8.4	2.4	15.9	6.7	16.8	9.1	14.9	18.5	17.3	10.1	11.8	3.9	3.1	7.0

Source: EPB: Major Statistics of Korean Economy, 1982.

Appendix

Table 4

Government Purchase Prices and Market Prices versus Cost of Production for Rice, 1948-1975
(wŏn per 80 kg)

Year	*Purchase Price (A)*	*Cost of Production (B)*	*Market[a] Price (C)*	*A/B (%)*	*A/C (%)*
1948	2.47	3.72	7.10	66.3	34.8
1949	2.67	6.71	13.21	39.9	20.2
1950	16.40	15.88	52.30	103.6	31.4
1951	65.37	n.a.	157.50	-	41.5
1952	200.62	329.09	447.50	61.0	44.8
1953	200.62	330.94	350.00	60.6	57.3
1954	308.33	330.94	581.00	93.2	53.1
1955	390.56	838.44	962.00	46.6	40.1
1956	1,059.00	1,134.00	1,591.00	93.4	66.6
1957	1,059.00	1,384.00	1,311.00	76.5	80.8
1958	1,059.00	1,297.00	1,157.00	81.6	91.5
1959	1,059.00	1,300.00	1,368.00	81.4	77.4
1960	1,059.00	1,313.00	1,687.00	80.7	62.8
1961	1,550.00	1,377.00	1,768.00	112.6	87.7
1962	1,650.00	1,422.00	2,801.00	116.3	58.9
1963	2,060.00	1,373.00	3,470.00	149.7	59.4
1964	2,967.00	1,936.00	3,324.00	153.3	89.3
1965	3,150.00	2,672.00	3,419.00	117.9	92.1
1966	3,306.00	2,495.00	3,750.00	132.5	88.2
1967	3,590.00	2,735.00	4,289.00	131.2	83.7
1968	4,200.00	3,403.00	5,140.00	123.4	81.7
1969	5,150.00	3,565.00	5,784.00	144.5	89.0
1970	7,000.00	4,642.00	7,153.00	150.8	97.9
1971	8,750.00	4,682.00	9,844.00	186.9	88.9
1972	9,888.00	6,115.00	9,728.00	161.7	101.6
1973	11,377.00	6,578.00	12,175.00	173.0	93.4
1974	15,760.00	7,959.00	17,821.00	198.0	88.4
1975	19,500.00				

Sources: MAF, *Grain Statistics Yearbook 1967-1975.*
MAF, *Cost of Production Survey, 1967-1975.*

Note: [a]November-January average prices.

From Ban et al. Rural Development, Howard, U.P., 1980, p. 240.

Table 5

GDP and Value Added by Public Enterprise

(billion won: current prices)

	1963	1964	1970	1971	1972	1973	1974	1975	1976	1977	1980
(1) Value Added by Public Enterprise	31.41	41.57	220.75	253.82	315.37	417.30	537.56	737.52	1,014.58	1,191.16	-
(2) GDP	469.40	678.05	2,405.05	2,976.55	3,676.22	4,808.64	6,844.21	8,855.53	11,659.46	14,854.04	-
(3) Non-agriculture GDP	253.45	346.27	1,695.20	2,103.32	2,637.93	3,538.77	5,079.92	6,553.54	8,702.10	11,286.34	-
(4) (1)/(2)(%)	6.7	6.1	9.2	8.5	8.6	8.7	7.9	8.3	8.7	8.0	9.6
(5) (1)/(3)(%)	12.4	12.0	13.0	12.1	12.0	11.8	10.6	11.3	11.7	10.6	11.6

Source: Han Seung-Soo.

Appendix

Table 6

International Comparison of Aid to Korea

($ million)

to	1961	1962	1963	1964	1965	1966	1967
Burma	22·0	31·7	45·3	24·3	14·9	16·2	11·2
Ceylon	14·4	18·1	14·8	11·9	15·7	31·5	45·9
India	663·3	728·3	972·9	1,201·4	1,286·7	1,225·7	1,350·2
Nepal	10·7	9·0	16·6	19·6	17·8	13·2	14·0
Pakistan	266·2	392·6	505·1	518·0	523·2	411·5	533·2
Cambodia	27·0	22·2	13·3	13·7	11·2	10·9	13·7
Formosa	113·6	77·6	76·1	49·3	67·5	60·8	85·4
Indonesia	115·0	157·7	108·2	66·9	42·9	81·4	247·9
Korea, Republic	229·2	236·2	262·2	172·6	220·5	209·2	261·4
Laos	51·6	31·2	36·5	45·8	68·2	68·5	73·8
Malaysia/ Singapore	20·3	31·8	14·1	16·6	38·9	59·0	48·9
Philippines	19·1	34·9	31·4	83·0	109·2	67·6	113·8
Ryu-Kyus	5·0	10·0	6·0	19·0	18·9	13·0	15·0
Thailand	38·8	52·8	42·1	33·2	46·8	53·6	61·4
Vietnam	167·1	176·0	226·6	244·5	315·7	508·7	448·5
Total (inc. others)	1,780·8	2,025·5	2,398·3	2,536·9	2,805·4	2,852·6	3,369·0

Note: Members of the Development Assistance Committee, from which almost all of the bilateral aid comes, are: Australia, Austria, Belgium, Canada, Denmark, France, Germany, Italy, Japan, Netherlands, Norway, Portugal, Sweden, Switzerland, the UK and the USA; data prior to 1965 do not include Australia which joined the DAC (though it is not an OECD member) in 1966

Source: Economist Intelligence Unit, The Relationship of Aid to Trade in the Far East, London, 1969, p. 47.

Appendix

Table 7

Ranking of Loan Priorities[1]

Class A Funds	
Primary & SOC Sectors	
Agriculture, Forestry, Fishery, Mining, International Trade, Cargo Handling, Salvaging, Government Monopolies (Salt & Tobacco), Electricity,[2] Water & Sewer Service,[2] Construction,[3] Transportations[3] and Warehousing.[3]	
Manufacturing Sectors	
Food[3]	: Starches, Canned Food, Frozen Food (For Export)[4]
Textiles	: Cotton Yarn,[2] Cotton Fabrics,[2] Silk,[2] Silk Fabrics,[2] Woolen Fabrics, Chemical Fiber Fabrics, Knitwear.
Chemicals	: Fertilizer, Insecticides, Carbide, Glycerin, Alcohol,[2] Sheet Glass, Paper, Cement, Bricks, Dyes,[3] Special Type Rubber[3] Drugs,[3] Leather,[3] Paints,[3] Sulphuric Acid,[3] Fire-Proof Material,[4] Rubber Products.[4]
Metal Product[3]	: Iron or Copper Wire, Nails, Rolled Steel, Basic Metal.[4]
Machinery[3]	: Pumps, Farm Machines, Motors, Textile Machines, Electrical Equipment, Measuring Instruments, Vehicles, Shipbuilding, Working Machine,[4] Industrial Machines,[4] Power-Using Machine,[4] General Machines,[4] Communication Equipment.[4]
Others[3]	: Saw Mill Products, Cement Products, Military Procurements, Textbooks, Mintage, Batteries, Briquettes,[2] Handicrafts for Exports, Smelting.
Class B Funds	
Funds not included in either Class A or Class C group.[5]	
Class C Funds	
Primary & SOC Sectors[6]	
Flower or Fruit-Culture, Charcoal Manufacturing and Highway Transportation.	
Service Sectors	
Wholesale & Retail Trade,[7] Small Scale Transportation & Storage, Entertainment, Hotels, Restaurants, Other Miscellaneous Personal Services, Leasing.[4]	
Manufacturing Sectors	
Brewing, Cosmetics, Clothing, Toys, Office Equipment,[3] Kitchen Equipment, and Wooden Articles. Soft Drink,[4] Confectionary,[4] Meat,[4] Leather Footwear,[4] Ornaments,[4] Sports Goods,[4] Seasonings,[4] Furniture,[4] Jewelry.[4]	

Notes: [1] Monetary Board Decision on December 20, 1953.

[2] Shifted to Class B funds on August 4, 1955 or on December 29, 1955.

[3] Added to Class A funds from Class C funds on August 4, or December 29, 1955.

[4] Added on March 7, 1964 and amended on June 16, 1964.

[5] Ice-Manufacturing, Marine Transportation Equipment and Warehousing were shifted from Class A to Class B funds on December 29, 1955. Tourist services were added to Class B funds (from Class C) on December 30, 1958.

[6] Shifted or added to Class C funds on August 4, 1955.

[7] Except the loans for super-market chains to improve the distribution system. (Stabilization No. 1200-26 promulgated by the MOF on January 10, 1974.)

From Wontak Hong: Trade, Distortions and Employment Growth in Korea, pp. 113-114.

Appendix

Table 8

Exports, Final Demand and Labour Intensity: 1978

		Exports Final Demand	Labour Intensity		
10	Dairy and Slaughter	6.4	0.1	0.1	
11	Proc. Sea Food	47	0.15	0.1	
12	Grain Polishing	0	0.5	0.46	
13	Cereal Flours	0.01	0.03	0.03	
14	Other food proc.	4.2	0.1	0.09	
15	Beverages	2.5	0.06	0.05	
16	Tobacco	0.05	0.05	0.05	3.9
17	Fibre Yarn	107.2	0.1	0.1	1.1
18	Textile Fabrics	68.6	0.15	0.15	4
19	Fabricated Text. Prod.	64.7	0.33	0.31	12.5
20	Leather and Leather Products	71.5	0.13	0.12	2.7
21	Lumber and Plywood	97.6	0.1	0.1	1.5
22	Wood Products and Furn.	40.6	0.4	0.3	0.5
23	Pulp and Paper	65.3	0.12	0.11	0.2
24	Printing and Publishing	7.2	0.21	0.2	0.7
25	Basic Organic Chemicals	85.7	0.03	0.03	
26	Basic Inorganic Chemicals	73.2	0.06	0.06	
27	Chemical Fertilisers	99.8	0.03	0.03	
28	Drugs and Cosmetics	3.3	0.08	0.08	2.2
29	Synthetic Resins	35.8	0.06	0.06	
30	Other Chemical Products	11.2	0.09	0.08	0.6
31	Petroleum Products	41.8	0.003	0.003	1.5
32	Coal Products	2.2	0.066	0.06	1.4
33	Rubber Products	66	0.14	0.14	
34	Non-Metallic Mineral Products	86.7	0.13	0.12	
35	Pig Iron and Raw Steel		0.03	0.03	
36	Primary Iron and Steel	94	0.03	0.03	
37	Non-ferrous Metal Ingots	107.3	0.07	0.07	
38	Fabricated Metal Products	73.2	0.11	0.1	
39	General Machinery	3.9	0.12	0.12	11.4
40	Electrical Machinery	13.7	0.07	0.07	4.2
41	Electronics and Comm.	52.8	0.15	0.15	7.5
42	Transportation Equip.	29.5	0.09	0.09	11.2
43	Measuring, Medical, etc.	29.2	0.14	0.14	
44	Miscellaneous Manufact.	69	0.25	0.23	
	Averages		0.11	0.11	

Source: 1978 I-O Tables, Competitive Import Model and Labour Tables, B.O.K., 1980.

Appendix

Table 9

External Debt (Outstanding)

	Maturity of:			Foreign	Total	
	3 yrs or more	1-3 yrs	less than 1 year	Banks' Account	Non-inter-bank	Interbank
1972	2,834	116	600	40	3,143	406
1973	3,421	139	612	89	3,922	338
1974	4,546	153	1,136	103	4,561	1,376
1975	5,745	302	2,167	242	6,457	1,997
1976	7,080	408	2,681	364	8,052	2,481
1977	8,583	350	2,924	792	9,655	2,993
1978	10,533	483	2,592	1,262	10,923	3,948
1979	13,871	554	4,651	1,951	13,789	6,716

Source: Handbook of the Korean Economy, 1980, Table 74.

Table 10

Types of Manufacturing Establishments (1978)

	Total	Joint Stock Co.	Other Corporations	Individuals
3	29,864	6,052 (253)	336 (109)	23,476 (23)
31	4,448	614 (183)	149 (35)	3,685 (14)
32	7,990	1,385 (349)	47 (125)	6,558 (31)
33	2,388	198 (233)	15 (32)	2,175 (15)
34	2,001	410 (124)	35 (158)	1,556 (19)
35	2,737	876 (228)	26 (162)	1,835 (25)
36	2,314	364 (173)	18 (89)	1,932 (15)
37	885	295 (229)	4 (96)	536 (29)
38	6,123	1,635 (277)	34 (171)	4,454 (25)
39	1,028	275 (197)	8 (102)	745 (32)

Source: EPB: Report on Mining and Manufacturing Census 1978 Seoul, 1979.

Note: Average number of employees in parentheses.

Appendix

Table 11: Monthly Labour Turnover Rates by Industrial (% of labour force leaving each month)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Average	5.1	4.6	4.0	3.9	4.0	3.7	3.8	4.4	5.1	5.3	4.8
Mining	6.0	6.6	5.3	3.7	3.5	2.6	2.7	2.9	2.7	3.2	3.7
Manufacturing	6.0	5.4	4.5	4.5	5.1	4.4	4.4	5.1	5.9	6.3	5.6
Electricity, gas water	2.2	1.6	1.9	2.4	1.1	1.1	1.7	2.1	2.5	3.4	1.5
Construction	3.0	2.3	4.8	4.0	3.0	3.2	3.2	3.4	4.1	4.1	4.9
Wholesale, retail, hotels	2.6	3.9	3.8	2.2	2.9	2.8	3.7	3.6	3.9	4.0	3.5
Transport, storate, communication	3.9	3.4	2.6	2.1	2.3	2.2	2.1	2.6	3.0	3.2	3.8
Banks, insurance business services	1.7	1.5	2.2	2.1	2.1	2.4	2.5	2.5	2.7	2.6	2.5
Social and personal services	2.6	2.2	2.4	1.9	1.7	2.1	2.1	2.0	2.4	2.2	2.0

Source: Ministry of Labour: Labour Statistics Yearbook, 1981.

APPENDIX

Table 12: Regional Wage Variation 1971-1979

	Whole country	Seoul	Busan	Gyeonggi	Gangweon	Chungnam	Chungbuk	Jeonbuk	Jeonnam	Gyeongbuk	Gyeorgnam	Jeju
1971	100.0	112.4	93.7	85.1	122.6	98.7	76.5	90.5	95.2	85.8	91.2	97.2
1972	100.0	113.1	88.9	93.9	115.0	95.3	85.0	83.8	91.8	88.8	99.1	87.9
1973	100.0	114.0	86.9	91.1	109.7	98.9	86.1	89.3	92.1	91.4	90.5	79.1
1974	100.0	111.1	87.6	88.9	111.7	96.6	87.7	85.5	92.6	88.9	104.3	80.9
1975	100.0	115.4	85.8	86.2	113.7	90.3	86.2	83.0	93.0	95.7	101.8	89.0
1976	100.0	116.2	87.5	85.0	109.7	98.7	80.3	102.3	96.0	82.0	107.4	79.4
1977	100.0	112.9	88.7	86.7	113.4	93.7	91.4	85.8	104.5	92.4	111.1	107.1
1978	100.0	114.6	86.6	87.4	119.3	91.2	86.2	86.3	99.3	90.2	110.0	109.8
1978	100.0	116.9	86.9	87.9	111.5	92.5	87.2	79.0	91.1	91.7	95.4	106.1

Source: EPB, Handbook of the Korean Economy 1980, Seoul, 1980.

APPENDIX

Table 13: Growth of the Garment Industry

	1966		1968		1970		1973		1978		1981	
Size by No of workers	Estabs	Workers	Estabs	Workers	Estabs	Workers	Estabs	Workers	Estabs	Workers	Estabs	Workers
5- 9	1,864	12,310	2,505	16,511	2.247	14.542	2,305	13,798	1,754	10,324	1,339	8,134
10- 19	554	7,098	763	9,693	562	7,222	419	5,435	364	4,793	423	5,915
30- 49	139	3,790	233	6,145	147	4,145	104	2,786	199	6,251	269	9,117
50- 99	37	3,125	27	1,837	15	1,027	44	3,385	156	11,396	272	19,951
100-199	20	3,890	21	3,131	29	4,330	63	9,216	185	26,724	239	34,368
200-299	9	3,492	28	8,064	38	10,947	32	7,975	116	28,204	136	33,799
300-499	5	2,852					28	11,040	75	29,235	55	24,595
Over 500	1	1,013	9	7,293	12	10,153	36	39,627	81	93,504	58	76,212
Total	1,629	37,570	3,586	52,674	3,040	52,366	3,031	93,262	2,930	210,839	2,811	212,091

Source: EPB, Manufacturing and Mining Censuses and Surveys, various years.

APPENDIX

Table 14: The Growth of the Electrical and Electronics Industry

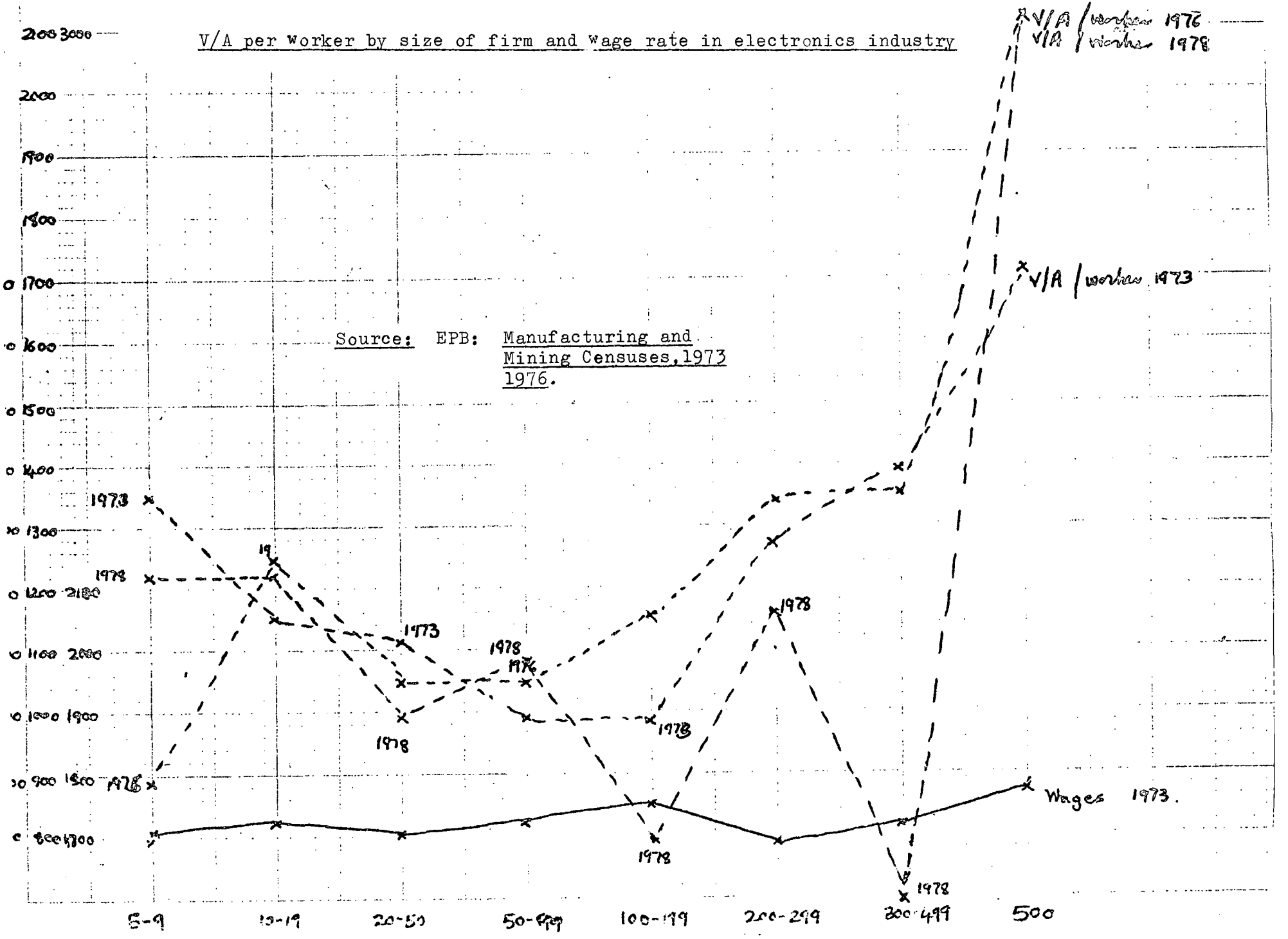
Electrical Industry 383

	1966		1968		1970		1973		1976		1978		1981	
Size by No of Workers	Estabs	Workers	Estabs	Workers	Estabs	Workers	Estabs	Workers	Estabs	Workers	Estabs	Workers	Estabs	Workers
5- 9	121	798	110	764	122	843	82	574	120	832	177	1,254	306	2,152
							119	1969						
10- 19	95	1,333	90	1,232	128	1,757	158	5,269	154	2,155	283	4,059	479	6,244
20- 49	89	2,781	106	3,165	143	4,430	64	4,548	229	7,364	359	11,965	390	12,220
50- 99	33	2,959	49	3,301	42	2,850	39	5,689	155	10,829	197	13 ,759	245	17,737
100-199	15	1,956	22	3,037	20	2,944	16	4,039	118	17,250	144	20,165	128	18,093
200-499	7	2,245	14	4,195	24	7,249	31	11,335	96	29,962	136	41,926	126	40,131
Over 500	6	6,913	10	12,080	17	19,350	49	62,465	78	113,822	93	139,024	83	115,971
TOTAL	366	18,354	401	27,774	496	39,417	558	95,515	950	182,214	1,389	232,152	1,757	213,048

Electronics Industry 3832

5- 9	26	154	26	167	27	203	17	116	43	293	69	481	130	918
10- 19	26	380	19	249	25	355	26	355	59	823	109	1,586	206	2,880
20- 49	15	404	24	1,061	46	1,546	41	1,352	95	3,053	150	5,192	198	5,923
50- 99	10	723	18	1,252	12	792	19	1,453	76	5,250	93	6,537	140	10,124
							19	2,699	69	10,130	91	12,788	74	10,696
100-199	5	659	8	1,115	13	1,990	10	2,513						
200-499	2	438	8	2,181	11	3.356	25	5.429	62	21.197	95	28,784	89	28,350
Over 500	4	5,049	4	4,717	8	9,631	36	50,934	64	98,026	72	108,955	62	92,760
TOTAL	87	7,755	117	10.745	142	17,873	183	64,851	475	138,772	629	164,323	889	151,651

% output	n.a.	n.a.	54%	72.4%	74.4%	64.5%	68.1%
% VA of 383	n.a.	n.a.	51.2%	71.5%	70.8%	59.4%	67.7%
VA to Output 382	n.a.	n.a.	41.7%	37.6%	35.1%	35.2%	35.1%


V/A per worker by size of firm and wage rate in electronics industry
Source: EPB: Manufacturing and Mining Censuses, 1973 1976.
V/A / worker 1976
V/A / worker 1978
V/A / worker 1973
Wages 1973.
1973
1978
1978
1978
1978
1978
1978
1978
1978
5-9
10-19
20-50
50-99
100-199
200-299
300-499
500

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